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VOLUME I

TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, ~~1959~~ 1960

No. ~~582~~ 21

ARO MANUFACTURING CO., INC., ET AL.,
PETITIONERS,

vs.

CONVERTIBLE TOP REPLACEMENT CO., INC.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS
FOR THE FIRST CIRCUIT

PETITION FOR CERTIORARI FILED DECEMBER 11, 1959
CERTIORARI GRANTED FEBRUARY 29, 1960

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Civil Action No. 56-357-A

CONVERTIBLE TOP REPLACEMENT CO., INC.

v.

AR MANUFACTURING CO., INC.
MAE SHAPERO, and
GEORGE SHAPERO
HAROLD R. SHAPIRO
MARSHALL SHAPIRO
and
JOHN RAYMOND HAMLIN

Basis of action: Infringement of Patent No. 2,569,724 Injunction; accounting; costs.

DOCKET ENTRIES

1956		
Apr.	27	Complaint filed.
		Summons issued.
May	10	Copy of patent in suit filed.
	23	Defendants' answer and COUNTERCLAIM, filed.
June	7	Plf's reply to defts' counterclaim filed.
	22	Plf's motion to file amended complaint bringing additional defendants in, filed.
July	9	ALDRICH, J. Pltf motion to add additional parties defendant with waiver of notice by atty for defts filed and allowed.
	9	ALDRICH, J. Pltf motion to file amended Complaint bringing in additional defts under advisement after hearing, and later allowed.
	28	Defendants' answer to amended complaint filed.
Nov.	21	ALDRICH, J. Defendant's motion to amend answer, and amended answer, assented to, filed.
1957		
Jan.	7	Stipulation that title to patent in suit, No. 2,569,724, is in plaintiff, filed.

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9 Depositions (3) of J. R. Hamelin, Geo. Shapero and Harold Robt. Shapiro, filed.

Feb. 7 Deft's notice of taking deposition of deft Harold R. Shapiro at Newton Feb. 20, 57, filed.

June 21 Depositions of Harold R. Shapiro and Edw. W. Gediman (one envelope), filed.

Oct. 16 Defendants' motion for summary judgment (exhibits 21 and 21 attached), filed.

Nov. 13 Deposition of George Shapiro filed.

25 ALDRICH, J. Defts' motion for summary judgment, under advisement after hearing.

Dec. 4 ALDRICH, J. MEMORANDUM of findings and rulings filed: motion for summary judgment denied. copy to counsel.

4 ALDRICH, J. ORDER denying defendants' motion for summary judgment entered; no further affidavits will be accepted. copy to counsel.

1958

Jan. 23 Defts' further requests filed.

June 21 Defts' list of patents to be relied upon, filed.

July 3 Copy of letter d. 7/1/58 from David Wolf to Paul V. Power stating deft will rely on British pat. No. 447 641 dated May 22, 1936 to Maurice Besoneau.

Aug. 19 ALDRICH, J. Trial without jury begins; evidence.

20 ALDRICH, J. Trial without jury continues; evidence; portion of dep of Harold Shapiro read by plf's counsel; view held by Court; trial without jury continues; evidence.

21 ALDRICH, J. Trial without jury continues; plf reopens case for purpose of offering exhibits 18 through 25; evidence; defts' motion to dismiss filed and denied after hearing; evidence;

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view held by Court; trial without jury continues; evidence.

22 ALDRICH, J. Stipulations as to certain facts filed; trial without jury continues; evidence; defts' motion to amend answer filed Nov. 1956, allowed by agreement.

25 ALDRICH, J. Trial without jury continues; evidence.

26 ALDRICH, J. Trial without jury continues; evidence.

27 ALDRICH, J. Trial without jury continues; evidence; depositions of wits *Wright* and *Wharton* and exhibits offered in evidence by both parties; deposition of *Hult* offered in evidence on question of misuse only; portions of depositions of *Geo. Shapiro* offered in evidence.

28 ALDRICH, J. Trial without jury continues; evidence; briefs by Sept. 15, 1958.

Aug. 28 Court Reporter's transcript of trial (8 vols) Aug. 19, 20, 21, 22, 25, 26, 27, 28, 1958, filed.

Oct. 2 ALDRICH, J. OPINION filed: finding that defendants have substantially infringed; court to hear parties further as to relief. copy to Messrs. Power and Wolf, in hand; copy mailed to Elliott J. Pollock, 803 Ring Bldg., Washington 6, D.C., of counsel for plaintiff.

16 ALDRICH, J. Plf's motion for special precept, filed and allowed.

16 Special precept of attachment issued; del'd to Marshal by counsel.

29 Marshal's return of spec precept; served Oct. 20th defts A. & Geo. Shapiro, John Hamlin, Mae Shapiro, Marshal Shapiro by attachment in Middlesex; same date by attachment in Norfolk

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County deft Harold Shapiro; same date service in hand to defts Mae, Geo. and Harold Shapiro and John Hamlin; without service on Marshall Shapiro (out of Dist. (Chi., Ill.)).

e. 1 ALDRICH, J. Hearing on entry of interlocutory decree.

15 ALDRICH, J. INTERLOCUTORY JUDGMENT entered: ORDERED, ADJUDGED and DECREED:

1. U.S. Letters Patent No. 2,569,724 . . . is good and valid in law, as to claims 3, 4, 5, 7, 8, 9 and 10 thereof;
2. that plf, Convertible Top Replacement Co., Inc. is . . . .possessed of the right, title and interest in and to Mackie-Duluk patent for, to and in Comm. of Mass., together with all rights of action for past infringement accruing since Dec. 30, 1953, of said Mackie-Duluk patent in said Comm. of Mass.;
3. that defts, comprising the corporate deft Aro Mfg. Co., Inc., and defts Mae Shapiro, George Shapiro, Marshall Shapiro, Harold R. Shapiro and John Raymond Hamlin, individually and as a copartnership dba Aro Top Sales Company, have infringed or contributorily infringed claims 3, 4, 5, 7, 8, 9 and 10 of said patent . . . ;
4. that plf. Convertible Top Replacement Co., Inc., recover of corporate deft Aro Mfg. Co., Inc., and of the individual defts Mae Shapiro, etc., damages adequate to compensate for infringement, but in no event less than a reasonable royalty, together with interest and costs as fixed by the Court;

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5. that cause be referred to William R. Hulbert, Esq. as Master; Master to report (inasmuch as there may be questions of law as to whether certain acts constitute infringement or contributory infringement in Mass....) such facts as will assist the Court in making appropriate rulings...

6. that a perpetual injunction be issued...restraining deft Aro Mfg., Co., Inc., and the several individual defts aforesaid, and each of them, their officers, agents, servants, employees, and each of them (a) from directly or indirectly making, etc., structures embodying invention disclosed and claimed in aforesaid claims of aforesaid patent:

(b) from directly or indirectly inducing infringement, in Comm. of Mass., of said claims of said Mackie-Duluk U. S. Letters Patent No. 2,569,724;

(c) from directly or indirectly selling in the Comm. of Mass., convertible automobile replacement top fabrics of types presently identified by defts under their part nos. 434, 224, 225, 226, 227, 228, 231, 233, 234 and 509, or equivalent of any of them;

7. that plf. recover from defts costs of action, to be taxed by Clerk; compensation of the master, at rate of $100 a day shall, unless otherwise agreed, be included in said costs; prior to final taxing the Court will determine whether additional costs shall be imposed pursuant to provs of 35 USC 284.

copy to Messrs. Power and Wolf, and Hulbert, Master.

1958

Dec. 16 Defts' motion to stay Interlocutory Judgment re par No. 6 under R. 62 (c) and (d), FRCP, filed.

18 ALDRICH, J. Motion to stay injunction allowed. David Wolfe, Esquire, for defts, notified.

1959

Jan. 13 Notice of Appeal filed by the deft. from the judgment entered in this action on December 15, 1958. c/s

---

COMPLAINT FOR INFRINGEMENT OF LETTERS PATENT

Now comes Plaintiff and for cause of action against Defendants alleges the following:

1. Plaintiff, Convertible Top Replacement Co. Inc., is a corporation duly organized and existing under, and by virtue of the laws of the State of Maryland, with its principal place of business at Chevy Chase, Maryland.

2. Defendant, Aro Manufacturing Co. Inc., is a corporation duly organized and existing under, and by virtue of the laws of the Commonwealth of Massachusetts, with a regular and established place of business at 1089 Commonwealth Avenue, in or near the City of Boston, Massachusetts; Defendant, Mae Shapero, is, upon information and belief, an officer of Aro Manufacturing Co. Inc., and resides at 1778 Commonwealth Avenue, in or near Auburndale, Massachusetts; Defendant, George Shapero is, upon information and belief, an officer of Aro Manufacturing Co. Inc., and resides at 1778 Commonwealth Avenue, in or near Auburndale, Massachusetts.

3. This action arises under the patent laws of the United States and more particularly under Section 1338 of Title 28, United States Code, and under Sections 271 and 281 of Title 35, United States Code, and is founded upon in-

fringement by Defendants of United States Letters Patent No. 2,569,724, as hereinafter more fully appears. . .

4. On October 2, 1951 United States Letters Patent No. 2,569,724 in the names of Harry A. Mackie and Stanley Duluk for "Convertible Folding Top with Automatic Seal at Rear Quarter," was duly and legally issued to General Motors Corporation, a corporation of Delaware. The entire right, title and interest in and to the said United States Letters Patent No. 2,569,724, was thereafter, on December 30, 1953, sold, assigned and transferred to Automobile Body Research Corporation, a corporation of Maryland, by virtue of an assignment duly recorded in the United States Patent Office at Reel 023, Frame 378; and since that date said Automobile Body Research Corporation has been and still is owner of those Letters Patent, except insofar as said Automobile Body Research Corporation has granted certain rights to Plaintiff, as hereinafter more fully appears.

5. On April 17, 1956, the said Automobile Body Research Corporation, by Territorial Grant, sold, assigned and transferred unto Plaintiff the right, title and interest in and to the said Letters Patent No. 2,569,724, for, to and in the Commonwealth of Massachusetts, and since that date Plaintiff has been and still is the owner of said territorial rights in said Letters Patent.

6. Defendant, Aro Manufacturing Co. Inc., has for a long time past and still is infringing and contributing to the infringement of said Letters Patent by making, selling and using convertible folding tops that are covered by said Letters Patent, within the Commonwealth of Massachusetts, and will continue to do so unless enjoined by this Court.

7. Defendants, Mae Shapero and George Shapero, as individuals and as alleged officers of the said Aro Manufacturing Co. Inc., have for a long time past and still

are infringing and contributing to the infringement of said Letters Patent by making, selling and using convertible folding tops that are covered by said Letters Patent, within the Commonwealth of Massachusetts, and will continue to do so unless enjoined by this Court.

8. Upon information and belief, Aro Manufacturing Co. Inc. is controlled by and in fact comprises the mere alter ego of Defendants, Mae Shapero and George Shapero, whereby the infringing acts of Defendants Aro Manufacturing Co. Inc. are in fact infringing acts of Defendants Mae Shapero and George Shapero.

9. On January 2, 1954, Automobile Body Research Corporation, Plaintiff's predecessor in title to said Letters Patent, gave written notice to Defendants of their said infringement, and Defendants have continued to infringe said Letters Patent after receiving said notice.

WHEREFORE, Plaintiff demands a preliminary and final injunction against further infringement by Defendants and those controlled by Defendants, an accounting for profits and damages, an assessment of costs against Defendants, and such further or other relief as this Honorable Court may deem meet and proper.

(s) WALTER JAY SKINNER
Shawmut Bank Bldg.
Boston 9, Mass.

Of Counsel:
ELLIOTT I. POLLOCK
803 Ring Bldg.
Washington 6, D. C.

DEFENDANTS' ANSWER

The Defendants in the above-entitled action collectively answer the Plaintiff's complaint as follows:

1) Defendants have no knowledge of the allegations of paragraph 1 and, therefore, demand proof.

2) Defendants admit the allegations of paragraph 2, except that they deny the allegation with respect to the address of Aro Manufacturing Co., Inc.

3) Defendants admit the allegations of paragraph 3, except that they deny infringement of Letters Patent No. 2,569,724.

4) Defendants admit that Patent No. 2,569,724, in the name of Harry A. Mackie and Stanley Duluk was issued to General Motors, but have no knowledge of or specifically deny each and every other allegation set forth in this paragraph and accordingly call upon the Plaintiff to prove the same.

5) Defendants have no knowledge of the allegation set forth in paragraph 5 and accordingly call upon the Plaintiff to prove the same.

6) Defendants deny the allegations of paragraph 6.

7) Defendants deny the allegations of paragraph 7.

8) Defendants deny the allegations of paragraph 8.

9) Defendants deny that they infringe Letters Patent No. 2,569,724, and further they deny they received a letter from Plaintiff's predecessor indicating they were infringing said patent.

Further answering the Bill of Complaint, the Defendants on information and belief allege that said Letters Patent No. 2,569,724 is wholly void and invalid at law and of no legal effect and is not infringed for one or more of the following reasons;

10) Because the alleged invention of said patent was shown and described in printed publications in the United States and countries foreign to the United States before the alleged invention by the patentee, and or more than one year prior to the filing of the application of which said patent issued as follows: *United States Patents*

Patent No.	*Name*	*Date*
1,809,505	Campbell	June 9, 1931
2,549,153	Ackermans	April 17, 1951

Foreign Patents

564,361 (Great Britain) September 24, 1944,

and others of whom Defendants are not at present advised but beg leave to add hereto by proper amendment when information thereof is obtained.

11) Said patent discloses no patentable invention over and or in view of the state of the art at and prior to the time the alleged invention is purported to have been made and as illustrated in the instances thereof referred to in the preceding paragraph.

14) The claims of said Letters Patent do not comply with the requirements of the patent laws of the United States and are directed to unpatentable aggregations and/or exhausted combinations and further are vague, indefinite, functional and incomplete and broader than the state of the art permits and, therefore, invalid and void.

15) The prior art known before the alleged invention of the articles and methods alleged to be secured to Plaintiff by the said Letters Patent so limits and restricts the scope of the claims of the said patent, the articles made or sold by Defendants and the method used by others in connection with the articles so made and sold, can not be regarded as infringements. Defendants do not manufacture, sell or offer for sale, practice or advocate use of combinations as set forth in the said patent but merely manufacture articles which are not a material part of said patent, that the articles manufactured by Defendants are not made especially for or adapted for use in articles covered by the claims of said patent and further are

staple articles or commodities of commerce which are suitable for substantial noninfringing uses.

* * *

19) Defendants manufacture only convertible replacement tops to replace worn, damaged, destroyed or stolen fabric tops of the original manufacturer. Said manufacturers each operate under license of said patent, which license includes a specific and/or implied license to purchasers to repair, replace and renew lost, stolen, broken, damaged, destroyed or worn out parts without liability for patent infringement, which specific and/or implied license extends to Defendants.

Further answering by way of counterclaim, the Defendants allege:

1) That this counterclaim constitutes a petition for declaratory judgment or decree under judicial code section 274 D 28 U. S. Code 2201 and 2202 holding that the patent in suit is invalid for want of invention and if valid, then it is not infringed.

2) Jurisdiction is invoked under judicial code section 274 D 28 U. S. Code 2201 and 2202 on a controversial issue arising under the patent laws.

3) The said Patent No. 2,569,724, as to each of the claims thereof, is invalid for the reasons specifically set forth in the foregoing answer. Each of such reasons being hereby incorporated in this counterclaim to the same extent as though specifically stated.

4) Said Patent No. 2,569,724, if valid, has not been and is not being infringed or contributorily infringed by the Defendants in this district or elsewhere.

Wherefore, Defendants pray:

a. That the complaint as regards the alleged causes of action of the Plaintiff against the Defendants be dismissed.

b. That this court find and enter a decree herein

holding that said Patent No. 2,569,724 is invalid for want of invention.

c. That this court find and enter a decree herein holding that said Patent No. 2,569,724 is invalid for anticipation and for the prior public use.

* * *

e. That this court, in the event a claim or claims of Patent No. 2,569,724 is found to be valid, then find and enter a decree herein holding that such claims or claim is not infringed by the Defendants or alternately is not contributorily infringed by the Defendants.

f. That Defendants have an implied and/or express license to repair, replace or renew damaged, destroyed, lost or stolen fabric automobile tops.

g. That the Defendants have judgment for costs and such other and further relief as equity may require or to this honorable court may seem meet and just.

(s) EZEKIEL WOLF
Attorney for Defendants

Dated
May 23, 1956

INTERROGATORIES

Now comes Plaintiff and, under the provisions of Rule 33, Federal Rules of Civil Procedure, propounds the following interrogatories to Defendants and to each of them.

DEFINITIONS

In connection with the following Interrogatories 1 to 6 inclusive, the term "replacement top" refers to a fabric having a configuration such as that it may be installed on a convertible automobile in place of the original fabric after the latter has worn out; and the said term is not

to be regarded as including the bows, the pillars, or the folding mechanism.

INTERROGATORY 1

(a) Has Defendant Aro Manufacturing Co., Inc., since the date of the grant of the patent in suit and prior to the filing of the Complaint herein, manufactured or sold replacement tops designed for installation on Ford convertible automobiles of any of the following models: 1952 model, 1953 model, 1954 model?

(b) If the answer to Interrogatory 1(a) is in the affirmative, have any of Defendants issued, or caused to be issued, any literature, advertising materials or instruction sheets relating to said replacement fabrics?

(c) If the answer to Interrogatory 1(b) is in the affirmative, give the title and date of each piece of literature, advertising material or instruction sheets relating to said replacement tops.

(d) For each document specified in your answer to Interrogatory 1(c), state whether one or more copies of such document was distributed by the following:

A. Defendant Aro Manufacturing Co., Inc.;

B. Defendant Mae Shapero or any partnership of which she is a partner;

C. Defendant George Shapero or any partnership of which he is a partner.

(s) WALTER JAY SKINNER
Attorney for Plaintiff

Of Counsel:

(s) ELLIOTT I. POLLOCK

ANSWERS TO INTERROGATORIES PROPOUNDED TO DEFENDANTS

Now comes the defendants and answer the interrogatories propounded to them under oath and collectively as follows:

Interrogatory No. 1 (a) Yes.

• • •

ARO MANUFACTURING COMPANY, INC.
By (s) MAE SHAPERO,
President

MAE SHAPERO
By (s) MAE SHAPERO

GEORGE SHAPERO
By (s) GEORGE SHAPERO.

COMMONWEALTH OF MASSACHUSETTS:
COUNTY OF : ss

Sworn to and subscribed before me this day of , 1956.

(s)

[SEAL] *Notary Public*

PLAINTIFF'S REPLY TO DEFENDANTS' COUNTERCLAIM

On pages 5 and 6 of Defendant's Answer there appear four paragraphs said to constitute a counterclaim, although they have no legal standing as such, and Plaintiff's reply to the said alleged counterclaim is as follows:

1. Paragraph 1 of the Counterclaim is denied.

2. Paragraph 2 of the Counterclaim is denied, except Plaintiff admits that there is a controversial issue between Plaintiff and Defendants arising under the U. S. patent laws; but Plaintiff states that the controversy is fully defined in the Complaint and Defendants' Answer thereto.

3. Plaintiff denies all allegations in Paragraph 3 of the Counterclaim.

4. Plaintiff denies all allegations in Paragraph 4 of the Counterclaim; the true facts in this regard are stated in the Complaint and are incorporated herein by reference.

Plaintiff also denies that Defendants are entitled to any of the relief prayed for in Paragraphs (a) to (g) inclusive on page 6 of Defendants' Answer.

Plaintiff therefore prays that the Counterclaim be dismissed.

(s) WALTER JAY SKINNER
Attorney for Plaintiff

AMENDED COMPLAINT

Now comes plaintiff and for cause of action against defendants alleges the following:

• • •

[Paragraph 1 being the same as paragraph 1 of the original complaint, is here omitted.]

2. Defendant, Aro Manufacturing Co., Inc., is a corporation duly organized and existing under, and by virtue of, the laws of the Commonwealth of Massachusetts, with a regular and established place of business at Newton, Massachusetts; Defendant, Mae Shapiro is, upon information and belief, an officer of Aro Manufacturing Co. Inc., and resides at 1778 Commonwealth Avenue, Newton, Massachusetts; Defendant, George Shapiro is, upon information and belief, an officer of Aro Manufacturing Co. Inc., and resides at 1778 Commonwealth Avenue, Newton, Mass.; moreover, upon information and belief, Mae Shapiro and George Shapiro are partners in a partnership doing business within the Commonwealth of Massachusetts as Aro Top Sales Co.; and the other partners in said Aro Top Sales Co. comprise, upon information and belief, Defendant, Marshall Shapiro, residing at 4970 Marine Drive,

Chicago, Illinois, Defendant, Harold R. Shapiro, residing at 3 Willow Park, Wellesley Hills, Mass., and Defendant John Raymond Hamlin, residing at 74 Broadway, Arlington, Mass.

[Paragraphs 3, 4, 5 and 6 being the same as paragraphs 3, 4, 5 and 6 of the original complaint, is here omitted.]

7. Defendants, Mae Shapiro, George Shapiro, Marshall Shapiro, Harold R. Shapiro and John Raymond Hamlin, and each of them, have for a long time past and still are infringing and contributing to the infringement of said Letters Patent by selling and using said convertible tops, within the Commonwealth of Massachusetts, and will continue to do so unless enjoined by this Court.

8. Defendants Mae Shapiro, George Shapiro, Marshall Shapiro, Harold R. Shapiro and John Raymond Hamlin, doing business as Aro Top Sales Co., have acted as a sales agency for the convertible tops manufactured by Aro Manufacturing Co., Inc.

9. Upon information and belief, Aro Manufacturing Co. Inc. is controlled by and in fact comprises the mere alter ego of the defendants as individuals who control the company and use the corporation solely to further the interests of their partnership, whereby the infringing acts of Aro Manufacturing Co. Inc. are in fact the infringing acts of the individual defendants.

[Paragraph 10 being the same as paragraph 9 of the original complaint, is here omitted.]

WHEREFORE, Plaintiff demands a preliminary and final injunction against further infringement by Defendants and those controlled by Defendants, an accounting for profits and damages, an assessment of costs against Defendants,

and such further or other relief as this Honorable Court may deem meet and proper.

(s) WALTER JAY SKINNER
Attorney for Plaintiff
82 Devonshire Street
Boston 9, Massachusetts

Of Counsel:
(s) ELLIOTT L. POLLOCK

ANSWER TO AMENDED COMPLAINT

Now comes the defendants, Aro Manufacturing Co. Inc., Mac Shapiro, George Shapiro, Harold R. Shapiro and John Raymond Hamlin, and collectively answer the amended complaint as follows:

It appearing that the amended complaint is in substance identical with the complaint as originally filed, the defendants above named herein incorporate as their answer to this amended complaint, to the same extent as if specifically recited the defendants answer as originally set forth together with the following additional answer:

Defendants collectively deny the allegations in Paragraph 8.

Defendants collectively deny the allegations in Paragraph 9.

Defendants collectively deny they received a letter indicating they were infringing Patent No. 2,569,724.

WHEREFORE, Defendants pray for the same relief as requested in the defendants original answer.

(s) EZEKIEL WOLF
Attorney for Defendants

Dated: July 27, 1956

REQUESTS FOR ADMISSIONS UNDER RULE 36 F.R.C.P.

Plaintiff, Convertible Top Replacement Co. Inc., requests Defendants, Aro Manufacturing Co., Inc., Mae Shapiro, George Shapiro, Marshall Shapiro, Harold R. Shapiro and John Raymond Hamlin, within ten (10) days after service of this request to make the following admissions for the purpose of this action only:

* * *

9. Aro Top Sales Co. applies for copyright registrations (a) A 93,701 of the year 1953, (b) A 153,997 of the year 1954, (c) A 185,671 of the year 1955, (d) A 187,676 of the year 1955, and (e) A 192,259 of the year 1955. Plaintiff's Exhibits M, N, O, P and Q are, respectively, certified copies of the foregoing applications for copyright registration.

10. Plaintiff's Exhibits R, S, T, U and V are copies of published works deposited by, or on behalf of, Aro Top Sales Co. in the Copyright Office of the United States.

11. The photostats which form a part of Plaintiff's Exhibits M, N, O, P and Q are copies of literature distributed by Aro Top Sales Co. to its customers.

12. The statements made in the applications for copyright registration, enumerated in Request for Admission 9, above, are true.

13. All of the statements made in the copyrighted literature, set forth in Plaintiff's Exhibit S, are true.

* * *

Respectfully submitted,

(s) WALTER JAY SKINNER

(s) PAUL V. POWER

Attorney for Plaintiff.

Of Counsel:

(s) ELLIOTT I. POLLACK

ANSWER TO PLAINTIFF'S REQUEST FOR ADMISSIONS UNDER RULE 36 FEDERAL RULE OF CIVIL PROCEDURE

9. Objected to.
10. Objected to.
11. Objected to.
12. Objected to.
13. Objected to.

ARO MANUFACTURING CO. INC.
By (s) MAX SHAPIRO, *Treas.*
(s) MAE SHAPIRO
(s) GEORGE SHAPIRO
(s) HAROLD R. SHAPIRO
(s) JOHN RAYMOND HAMLIN

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF SUFFOLK, SS.

Sworn to and subscribed before me this 16th day of August 1956.

(s) DAVID WOLF
[SEAL]. *Notary Public*

FURTHER ANSWERS TO PLAINTIFF'S REQUEST FOR ADMISSIONS UNDER RULE 36 F.R.C.P.

Requests numbered 5 to 13 inclusive—Yes.

ARO MANUFACTURING CO. INC.
By (s) MAX SHAPIRO
(s) MAE SHAPIRO
(s) GEORGE SHAPIRO
(s) HAROLD R. SHAPIRO
(s) JOHN RAYMOND HAMLIN

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF SUFFOLK, ss.

Sworn to and subscribed before me this 28th day of August 1956.

(s) DAVID WOLF
Notary Public

[SEAL]

REQUESTS FOR ADMISSION

Now comes Plaintiff and, under the provisions of Rule 36, Federal Rules of Civil Procedure, requests that Defendants and each of them, within ten (10) days after service of this request, make the following admissions for the purpose of this action only:

* * *

27. Neither Defendant Harold R. Shapiro, nor any of the other Defendants, has ever seen a 1952, 1953 or 1954 Ford or Mercury convertible automobile, or a 1952, 1953, 1954 or 1955 Lincoln convertible automobile, which has a folding top bearing a patent notice thereon indicating that said folding top is manufactured or licensed for manufacture under any U. S. patent.

* * *

30. The following statements made by Defendant Harold R. Shapiro are true:

"Q. [by Mr. Wolf] Mr. Shapiro, will use please name those cars of original manufacture which use wiper arms and cushion? A. 1952, 1953, and 1954 Ford and Mercury. 1952 to 1955, inclusive, Lincoln. * * *"

* * *

Respectfully submitted,

(s) WALTER JAY SKINNER
Attorney for Plaintiff

Of Counsel:

(s) ELLIOTT I. POLLOCK

INTERROGATORIES UNDER RULE 33, F.R.C.P.

Now comes Plaintiff and, under the provisions of Rule 33, Federal Rules of Civil Procedure, propounds the following further interrogatories to Defendants and to each of them:

10. Reference is made to the following statement appearing at pages 4-5 of Defendants' Original Answer in the instant suit: "* * * at the time of the sale of said Patent No. 2,569,724 to Automobile Body Research Corporation, substantially all automobile convertible tops and assemblies were being manufactured in accordance with Patent Nos. 2,549,153 and or 2,569,724 * * *."

Please list those automobile convertible tops and assemblies which were being manufactured in accordance with Patent No. 2,569,724 at the time of said sale of Patent No. 2,569,724 to Automobile Body Research Corporation.

* * *

Respectfully submitted,

(s) WALTER JAY SKINNER

Of Counsel: *Attorney for Plaintiff*

MOTION TO AMEND DEFENDANT'S ANSWER AND AMENDED ANSWER

Now comes the Defendants in the above entitled action and collectively move to amend the Defendant's answer by adding to paragraph ten (10) of said answer the following United States patents with said answer to be read as if these following patents were originally incorporated into the answer.

* * * *

No. 1,778,356	K. E. Coppock	October 14, 1930
* * *		
No. 2,046,574	J. A. Olivier	July 7, 1936
No. 2,065,027	B. S. Rinker et al	December 22, 1936

No. 2,074,620	A. Sa Couto	March 23, 1937
No. 2,185,581	M. Bessonneau	January 2, 1940
No. 2,289,173	F. C. Best	July 7, 1942

Respectfully submitted,
(s) Ezekiel Wolf
(s) David Wolf
Attorneys for Defendants
(s) Walter Jay Skinner
Attorney for Plaintiff

November 14, 1956
Aug. 22, 1958
Aldrich, J.
Allowed by agreement.
By the Court
(s) John F. Davis
Deputy Clerk

DEFENDANT'S ANSWER TO PLAINTIFF'S REQUEST FOR ADMISSIONS

Now comes the defendants in the above entitled action and collectively answer the plaintiff's requests for admission as follows:

27. Yes. To the best of our present knowledge.

30. Yes.

Abo Manufacturing Co. Inc.
(s) Mae Shapiro
(s) George Shapiro
(s) Marshall Shapiro
(s) Harold R. Shapiro
(s) John Raymond Hamlin

STIPULATION

Now come the parties to the above identified action and, through their respective attorneys, stipulate as follows:

H. A. Mackie and S. Duluk, U. S. Letters Patent No. 2,569,724, for "Convertible Folding Top with Automatic Seal at Rear Quarter" was issued by the U. S. Patent Office to General Motors Corporation, a corporation of Delaware, on October 2, 1951. Said General Motors Corporation, by virtue of an assignment dated December 30, 1953, duly recorded in the U. S. Patent Office at Reel 023, Frame 378, assigned the entire right, title and interest in and to said Letters Patent No. 2,569,724, to Automobile Body Research Corp., a corporation of Maryland. Said Automobile Body Research Corp., by virtue of a Territorial Grant, dated April 17, 1956, and duly recorded in the U. S. Patent Office at Reel 198, Frame 107, assigned and granted to Convertible Top Replacement Co., Inc., a corporation of Maryland, the right, title and interest in and to said Letters Patent No. 2,569,724, including rights to past infringement, for, to, and in the Commonwealth of Massachusetts.

Convertible Top Replacement Co., Inc., the plaintiff in the present action, has record title to said U. S. Letters Patent No. 2,569,724, by virtue of the aforementioned chain of title, for, to and in the Commonwealth of Massachusetts.

CONVERTIBLE TOP REPLACEMENT CO., INC.
By: (s) ELLIOTT I. POLLOCK
Dated: January 4, 1957 *Attorney for Plaintiff*

ARO MANUFACTURING CO., INC.
MAE SHAPIRO
GEORGE SHAPIRO
MARSHALL SHAPIRO
HAROLD R. SHAPIRO
JOHN RAYMOND HAMLIN
By: (s) DAVID WOLF
Dated: January 7, 1957 *Attorney for Defendants*

DEFENDANT'S ANSWERS TO PLAINTIFF'S INTERROGATORIES

Now comes the defendants and collectively answer the plaintiff's interrogatories under oath as follows:

10. Defendants are informed that there is a reasonable possibility the following automobiles having tops of original manufacture might be considered to read upon one or more claims of patent No. 2,569,724: 1952-1954 Ford and Mercury, 1952-1955 Lincoln, 1953-1954 Cadillac, Oldsmobile, Buick, Pontiac and Chevrolet.

ABO MANUFACTURING CO. INC.
(s) MAE SHAPIRO
(s) GEORGE SHAPIRO
(s) MARSHALL SHAPIRO
(s) HAROLD R. SHAPIRO
(s) JOHN RAYMOND HAMLIN

COMMONWEALTH OF MASSACHUSETTS
COUNTY OF SUFFOLK, ss.

Sworn to and subscribed before me this 7 day of February, 1957.

(s) DAVID WOLF
Notary Public

[SEAL.]

MOTION FOR SUMMARY JUDGMENT

Now come the defendants in the above entitled case and move the complaint herein be dismissed on summary judgment under F.R.C.P. 56 on the grounds that the Convertible Top assembly made and/or sold or installed by the defendants for use in a combination allegedly patented by the plaintiff as set forth in patent No. 2,569,724 constitutes a repair of such patented combination, and not a reconstruction of the patented combination, or as alter-

nately stated the structures made and/or sold or installed by the defendants for use in combinations as set forth in patent No. 2,569,724 do not constitute an infringement of said patent in view of the fact that such structures are unpatented per se and the original structures in the patented combination are by their very nature perishable items which in the normal course of usage of the patented combination are expected to be replaced.

On the basis of the foregoing material, it is believed there is no material issue of facts between the parties and this case is proper to be disposed by way of a Summary Judgment without putting the defendants to substantial expenses of a trial.

ARO MANUFACTURING CO., INC. et als.
(s) DAVID WOLF
EZEKIEL WOLF
Attorneys for Defendants

ORDER
December 4, 1957.

ALDRICH, D. J.

Defendants' motion for summary judgment is denied. Because counsel have briefed and argued certain matters rather fully, and have invited comment, some observations thereupon are set forth in the accompanying memorandum. It is to be understood that these are partial, only; that some are obviously dicta, and none is necessarily final except as to the denial of the action. No further affidavits will be accepted.

By the Court
(s) ALDRICH
D.J.
By: (s) FRANCIS R. FOLEY
Deputy Clerk.

MEMORANDUM

December 4, 1957

ALDRICH, D. J.

In connection with defendants' motion for summary judgment I make the following observations and rulings.

The replacing of the entire fabric, if damaged locally only, instead of patching, or if faded or otherwise injured in appearance, even though such full replacement is not always done, is probably, on the record, because of the nature and purpose of the product, to be equated with replacing tops that are completely deteriorated.

The fact that only a small portion of the replaced fabric is covered by the patent does not enlarge defendants' rights, if any. If, by reason of a custom in the trade, the fabric is to be treated as a unit, it is for the burden and benefit of both parties.

The replacing of fabric merely to obtain a color change must, on the record, be so rare as to be disregarded as de minimis.

I will not rule as matter of law that replacing such a substantial item occasionally during the life of the car, even though expected and necessary, falls in the category of repair. A top, by nature, deteriorates. The fact that another portion of the invention, being of metal, is less perishable, does not necessarily mean that § 271 applies only to the longest-lived member. *Micromatic Hone Corp.* v. *Mid-West Abrasive Co.*, 6 Cir., 177 F.2d 934, is inapplicable. The design, or shape, of the fabric is an essential part of the invention, whereas that of the abrasive was not. I do not believe there is any automatic life-of-the-car rule for such a matter. If a substantial part of the invention wears out, replacement may be reconstruction rather than repair. See *Automotive Parts Co.* v. *Wisconsin Axle Co.*, 6 Cir., 81 F.2d 125, 127.

As to the agreement of July 21, 1955, I will not take parole evidence. I rule,

a) The agreement was a release and, in effect, future license, to the parties named as to all structures made before July 21, 1955, and all replacements installed before that date, and a license as to all new structures manufactured thereafter up to December 31, 1955, excepting replacements, without, apparently, and it seems immaterial, further payment of royalty; and

b) a license, on a royalty basis, of future replacements by Ford that come within the patent.

As to structures manufactured between July 21 and December 31, 1955, the defendants would not be liable for contributory infringement, if their conduct should be found to have been unrestrictable* repair, but as to replacements on structures manufactured before then they have any protection flowing from the agreement only as to replacements made after July 21st. I do not construe the agreement to release contributory infringers for rights of action already accrued.

On its face the agreement demonstrated an intention not to release persons like the defendants who had made replacements in the past or, as to the future, to approve replacements by anyone except Ford. True, it released all parties named, which did not include defendants, for past replacements, but this was incidental to its main purpose. It was not necessary, by any theory of circuity of action, to have the release extend to persons like the

* I accept defendants' contention to the extent that if conduct is *clearly* repair the patentee should not be permitted to require payment of further royalties therefor.

defendants retrospectively in order fully to protect the owners of cars and other named parties. I can think of no right of action defendants would have against them. I do not believe defendants are entitled to the fortuitous benefit of the old joint tort-feasor rule, the more particularly since they are the ones who, presumably, made profits from the contributory infringement. I doubt whether such profits would have been recoverable from the parties named and released in the agreement.

I agree with defendants that the situation is different as to replacements made after July 21, 1955. If the agreement is to convey to the parties named the full benefit outlined, it would be an empty thing if such parties could hang their clothes on a hickory limb, but not go near the water. If replacement is legitimate repair, no average owner can do-it-yourself, and he must be free to go to persons in the position of defendants without apprehension on their part. As to the past, they took their chances.

In sum, I do not presently find defendants protected anywhere by the doctrine of repair, and that doctrine will never help them as to 1952-54 Fords prior to July 21, 1955.

(s) ALDRICH
U.S.D.J.

STIPULATION WITH REFERENCE TO ACKERMANS PATENT NO. 2,549,153

Now come the parties in the above entitled Civil Action and stipulate that Plaintiff will not, at the trial of the above identified cause, attempt to carry the date of the invention described and claimed in Plaintiff's patent No. 2,569,724, back of the filing date of Ackermans patent No. 2,549,153.

July 1, 1958

(s) ELLIOTT L. POLLOCK
Attorney for Plaintiff

June 24, 1958

(s) DAVID WOLF
Attorneys for Defendants
EZEKIEL WOLF, WOLF & GREENFIELD
68 Devonshire Street
Boston 9, Mass.

FURTHER REQUESTS FOR ADMISSION BY DEFENDANTS

And now come the defendants and collectively under the provisions of Rule 36, Federal Rules of Civil Procedure, request that plaintiff within ten (10) days after service of this request make the following admissions for the purpose of this action only:

43. Attached hereto and labelled as exhibit 25[*] is a complete copy of an agreement entered into July 21, 1955, between Automobile Body Research Corp. and Ford Motor Company.

Respectfully submitted,
ARO MANUFACTURING CO., INC. et al
EZEKIEL WOLF
DAVID WOLF
Attorneys for Defendants

January 22, 1958

[* Exhibit 25 referred to, being the same as Defendants' Exhibit DD, infra Volume II, is here omitted.]

STIPULATION

Now comes the parties to the above identified action and, by their attorneys, stipulate that if appropriately qualified and informed persons associated with Automobile Research Corp. and General Motors Corp. were called to testify in the instant proceeding, they would testify as follows:

1. The General Motors' convertible top, with an automatic seal at the rear quarter, originated with Harry A. Mackie and Stanley Duluk, development engineers with General Motors Corp., in the year 1949. Said Harry A. Mackie and Stanley Duluk were granted U.S. patent No. 2,569,724 on their convertible top with an automatic seal; and the Mackie et al patent broadly gives a description of the mode of operation of General Motors' top.

2. John W. J. Ackermans submitted his original application Serial No. 666,413, which later matured into U.S. patent No. 2,549,153 for "Folding Top for Automobiles," to General Motors in the spring of 1946. General Motors advised Mr. Ackermans that it was not interested in his application. Mackie and Duluk, the patentees in U.S. letters patent No. 2,569,724 never saw the Ackermans original application which was submitted to General Motors in 1946; and no one ever communicated the contents of this Ackermans application to them. This application of Ackermans was also submitted in 1946 to other automotive manufacturers.

3. During the years 1946 to 1949 inclusive General Motors continued to manufacture and sell tops wherein the fabric in the rear quarter was secured on the outside of the automobile body. It was not until the middle of 1949 that General Motors began its development of the structure shown in the Mackie and Duluk patent which includes a top having an automatic seal in the rear quarter section. Mackie and Duluk, first, and two other General Motors

employees, namely Kenneth E. Coppock and Jesse D. Compton, secondly, worked on these tops over a period of time commencing in 1949, before the rear quarter seal arrangement which appeared on 1950 and subsequent General Motors cars was finally developed.

4. General Motors was granted the Mackie and Duluk patent No. 2,569,724. The General Motors structure of certain models utilize a fabric top, wiper arm, trough, folding bow mechanism and tonneau with the top secured to the trough below the body line and a wiper arm attached to the folding bow to press against the fabric, all as shown in the Mackie and Duluk patent. However, General Motors uses a weatherstrip in a pocket on the inner side of the fabric instead of a weatherstrip mounted on the body as shown in Mackie and Duluk; but at least some of the claims of the Mackie and Duluk patent do not specifically recite the weatherstrip as an element in the claims.

5. Automobile Body Research Corp., received approximately the following sums in the years 1955, 1956, 1957:

From	*1955*	*1956*	*1957*
General Motors Corp.		8000.00	6800.00
Ford Motor Co.	35000.00	6545.00	6485.34
Atlas International Co.	1000.00	5925.00	14900.00

Of these sums: General Motors paid nothing as a royalty for replacement top manufacture under the Mackie and Duluk patent since General Motors had reserved a royalty-free license for manufacture of such replacement tops under the Mackie-Duluk patent. General Motors did, however, pay royalties for the manufacture of replacement top fabrics under the Ackermans patent. Ford paid nothing in 1955, $212.00 in 1956 and $152.34 in 1957 as a license royalty for replacement top manufacture, the re-

mainder of the sums paid in these years being paid in accordance with the provisions of a release settling for past infringement. The sums paid by Atlas International company were license royalties for the manufacture of replacement top fabrics under the Ackermans and Mackie-Duluk patents.

6. The Ford Motor Company was not informed of the transfer of rights from Automobile Body Research Corp. to Convertible Top Replacement Co., Inc. because the agreement between Ford and Automobile Body Research Corp. did not contain a "most favored nations" clause.

7. Atlas International Co., Inc. was informed of the transfer from Automobile Body Research Corp. to Convertible Top Replacement Co., Inc. and ratified such transfer.

(s) ELLIOTT I. POLLOCK
Attorney for Plaintiff

(s) DAVID WOLF
Attorneys for Defendants
EZEKIEL WOLF, WOLF & GREENFIELD

STIPULATION

It is hereby stipulated by and between the parties that one or more claims of Ackermans patent 2,549,153 have been held to be infringed by United States Court of Appeals for the Fourth Circuit by the General Motors 1951 Chevrolet and that royalties are presently being paid to Automobile Body Research Corporation on replacement tops made specifically for 1950 to 1953 General Motors cars, 1952 to 1954 Ford Motor cars and the 1955 Lincoln.

(s) ELLIOTT L. POLLOCK
Attorney for Plaintiff

(s) DAVID WOLF
Attorneys for Defendants
EZEKIEL WOLF, WOLF & GREENFIELD

OPINION *

October 2, 1958

ALDRICH, D. J.

The plaintiff is the present owner of U.S. Patent #2,569,724, issued Oct. 2, 1951, for a "Convertible Folding Top [for so-called convertible automobiles] with Automatic Seal at Rear Quarter," hereinafter called Mackie-Duluk. The defendants manufacture, for replacement purposes only, the fabric portion of convertible tops, which they either install themselves or sell for installation by trimmers (a generic term for body shops, etc.) and an insignificant number of do-it-yourself car owners. These tops are custom-designed by make and year to effect accurate replacements on all standard American cars, and are so advertised. Included are all General Motors and Ford makes for the years 1952-1954, when (roughly) all of these cars were manufactured with Mackie-Duluk tops. The plaintiff claims infringement and contributory infringement. The defendants deny any infringement. They also assert invalidity of the patent.[1]

A convertible car is one which, as a general rule, appeals particularly to persons who are conscious of style or appearance. While from the standpoint of utility a top might last many years, in practice, because of fading, partial chafing and other relatively superficial wear, the fabric is usually replaced every three years, or even oftener. Thus the normal life of the fabric is several times less than that of the car. I regard as irrelevant the point made by the plaintiff that so many replacements are not really "needed." The fabric is obsolete when it

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* Not to be reported to West Publishing Co.

[1] They further assert full protection by virtue of certain releases or licenses given General Motors and Ford, which point I resolved against them on their motion for summary judgment, and see no reason to go into further. Finally, they claim mis-use of the patent, a defense I find clearly not made out.

no longer meets the generally accepted standards of its users. This principle applies also to plaintiff's contention that a top could be repaired by being patched, instead of being replaced. Convertible car owners do not like patches. The fact that tops "could" be patched is irrelevant.

Car manufacturers themselves have little interest in either manufacturing or replacing fabric tops. Consequently there has grown up a sizable independent top industry, of which defendants are locally, and perhaps nationally, leaders. They do not manufacture, or install, any metal parts, components, or adjuncts. Unlike the fabric, all such metal normally lasts the life of the car.

The most basic defense is invalidity. While a great deal of trial time was spent on this issue, with testimony extending to a French device that could not be explained, a folding baby-carriage top which lacked even superficial resemblance to plaintiff's, and prior patents whose similarities, if any, could be found only by speculation as to what may have been in the mind of the artist who made the drawings, defendants have raised no doubts in my mind on this issue. Their case is a striking example of attempting to argue backwards, in the light of the invention, that it was always obvious. They have not succeeded even in that. Mackie-Duluk was a substantial and enlightened step, filling a long-felt want, in a field in which defendants have produced, with one exception, only paper patents,[2] the most emphasized being foreign, which did not even purport to do what Mackie-Duluk accomplished.

[2] The exception is Ackermans, hereinafter discussed. Defendants also contend that Bessaneau was "reduced to practice," and that the "Bessaneau patents were embodied in commercial products." There were three Bessaneau patents. The only basis for these assertions was a French photograph of one car, as to which even defendants' expert could not identify which patent, if any, was reproduced. I have been shown no reason to disagree with plaintiff's expert's opinion that this was a custom-made and not a production model. It does not even appear whether it worked.

In 1950 the normal convertible car [3] had a power-operated folding top which could be raised and lowered without leaving the driver's seat. However, if a neat and weather-resistant fit was desired at the rear quarter (the area behind the side window where the top meets the tonneau), it was necessary to make a joinder or seal by manually snap-fastening the fabric to the outside of the tonneau at the so-called belt line each time the top was raised. These snaps could not be worked from inside the car, and therefore the top was not fully automatic. Furthermore, with the passage of time, the fabric was apt to change in shape at this area, affecting the fit. If the car owner chose to leave the fastenings unsnapped, the appearance of the car was damaged, the wind would blow in, and water might be admitted in substantial quantities. There was also a question of unauthorized manual access under the flap. Mackie-Duluk solved all of these difficulties.[4] For three years, until some further improvements, the nature of which has not been described, were made, the large majority of American convertibles were manufactured with this top.

Defendants have not attempted to show any other production top which offered Mackie-Duluk's features. Of the sizable number of prior patents introduced in evidence, none individually suggested such features in combination, and none even suggested them separately without substantial and, I believe, highly imaginative development. I do not deem individual analysis of most of them called for.[5] In addition to my various observations during the

[3] I disregard for all purposes, as indefinite and unsatisfactory, defendants' unsubstantiated oral testimony about some 1938 or 1948 cars.

[4] The matter of unauthorized access, at best an occasional matter of sales-talk, even though solved, I cannot regard very seriously.

[5] Since defendants make so much of the Bessaneau references I will say that I do not find there any teaching of a wiping arm (and if any of his patents effected what defendants contend was a seal (although

presentation of this evidence, I merely remark it seems to me that few, if any, of the suggestions of defendants' expert, whose qualifications I find to be minimal in the over-all aspects of the matter, should have been even discernable, let alone apparent, to persons skilled in the art, I further accept fully plaintiff's expert's testimony on the subject of impracticality. Frankly, I am surprised at this defense.

Mackie-Duluk brought the fabric from outside the tonneau at the rear quarter, inside. This in itself was not new. But they extended the flap down so that the bottom line was at the axis of rotation of the bows, and showed that here the fabric could be permanently affixed to the bow and the tonneau without ripping when the top was lowered or raised. Then, rather than affixing the fabric to the tonneau itself, they attached it to a trough, or gutter.[6] Water entering between the fabric and the tonneau would be directed into the trough, and carried out of the car by a drain. In order to reduce to a minimum the quantity of water thus admitted, Mackie-Duluk added a so-called wiping arm or bow inside, which pressed the fabric outward against the top of the tonneau at the belt line, thus effecting a seal. This arm served the additional purpose of keeping the fabric taut against the tonneau, counteracting wind or hand pressure. It also preserved appearance. The evidence contradicts what defendants underlined in one of their briefs, that the wiping arm "does not act as a guide or positioning member for the fabric."[7]

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he does not mention the subject), I believe it was not even as good a one as a Ford-without-cushion resulting from defendants' replacement, hereinafter discussed, which defendants urge me to find was not a seal at all.

[6] Claim 8.

[7] All quotations in this opinion except single words, are from defendants' briefs, and not from the testimony.

During the processing of this patent a discussion arose concerning the "seal" that the wiping arm was intended to effect at the body line. I have no doubt but that Mackie-Duluk wished this jointure to be as water-tight as practicable. Most of the discussion with the examiner was about the location, or the attachment, of a resiliant strip or cushion for this purpose. Mackie-Duluk finally omitted mention of this strip in many of the claims. I find, though, that whenever they spoke of a seal, however described, they still meant at the belt line, and one that was substantially tight. On the other hand, I disagree with defendants' contention that Mackie-Duluk claimed a seal "in order to generically claim the cushion." The strip is specifically mentioned in some claims, and conspicuously absent in others.

The only prior art requiring specific discussion is Ackermans, #2,549,153, April 17, 1951, a co-pending application which I find was processed by the same examiner. Among the differences noted by the plaintiff, Ackermans' flap did not come down far enough to fasten, and there was no wiper arm. Such seal as was obtained at the body line resulted only from fabric tension. This was not satisfactory even when new, depended upon more careful installation then could be expected in mass production, and deteriorated in use. Defendants point out that if the flap was extended further downward, permanently attached to a trough, and a wiper arm added, one would have Mackie-Duluk. They then seek to depreciate the importance of permanently fastening the fabric, with which I disagree. They add that it was "perfectly obvious to anyone" that Ackermans could be attached. Apparently it was not obvious to Ackermans. The fabric could not be attached unless brought down considerably further than Ackermans showed it. It was no more obvious that his flap, which came down half way to the axis line, could

be attached, than it was that the pre-1950 top, which came down none of the way, could be. As I remarked during the testimony, all that defendants say is that if Ackermans had designed Mackie-Duluk, he would have designed Mackie-Duluk. I do not find anything in Ackermans, or even any other prior art, which made Mackie-Duluk obvious or anticipated.

I pass to the question of infringement. This has two aspects. Some cars manufactured and sold with Mackie-Duluk tops were licensed. Others were not. As to the former, defendants are protected if their fabrics are to be regarded as mere repair, and not reconstruction. As to the latter, defendants have no protection against a claim for contributory infringement under §271 (c) if they made a material part, with knowledge that it was to be used in a patented structure, which was not a staple article of commerce suitable for substantial non-infringing use. All that can be said with regard to this last is that some of the fabrics manufactured by defendants for cars with Mackie-Duluk tops by happenstance may also fit some cars with other types of tops. This does not alter the fact that they are admittedly purposely designed for and advertised for, Mackie-Duluk tops. When parties attempt such a defense as this it is difficult not to apply the doctrine of noscitur a sociis with respect to others.

The defense of repair requires more consideration. The entire top consists of a complex bow structure, the fabric, the wiper arm and the trough, all attached to the body line of the car. Defendants point out that they replace only one of these items. This is true enough. However, the bows are standard, and not part of the invention. I disregard them, and also, of course, the car body itself. The wiping arm and trough are small, simple, and inexpensive pieces of metal, costing a twentieth or less.

the price of even the cheapest fabric.[8] It seems clear that if defendants replaced them along with the fabric, they would be reconstructing the patent, not repairing. Whether the test be that of substantial reconstruction, or domination of the part replaced, or frequency of replacement, I find that replacing the fabric is not permissive repair.

The matter which has given me substantial difficulty arises out of the seal, aforementioned, a partial defense. When defendants received notice of infringement they consulted counsel, who apparently advised them to substitute a "shingle" above, for the cushion at the belt line. The defendants took his advice. I do not believe this substitution was made overnight, and that no cushion fabrics were sold following the receipt of the infringement notice. Furthermore, I find this shingle was an equivalent.[9]

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[8] With respect to defendants' further argument that even as to the fabric itself the only portion involved is the seal or flap at the rear quarter, it is interesting to note defendants' own evidence, which showed that Mackie-Duluk cars could have applied to them, without any structural change, by using snap-button receptacles already on the car for the boot, a complete, standard pre-Mackie-Duluk top with outside-the-tonneau snaps. In other words the car owner, and defendants in his stead, did not have to subject themselves to replacement royalties if they did not want to. I mention this not as being determinative, but as bearing on plaintiff's allegedly inequitable conduct in trying to be paid every time for a whole new top. If an owner does not want to replace with plaintiff's top, he does not have to. Defendants admitted it is even cheaper, and an easier installation, to replace with the outside-snap type than with a new Mackie-Duluk. However, this is not what defendants do.

[9] The shingle is somewhat similar in shape and attachment to the standard cushion, but is immediately above, rather than at, the belt line. It is no simpler or cheaper, affects no possible improvement, and serves the same purpose of effecting a seal at the belt line, as does the cushion. It would never have been adopted by defendants except as an attempt to avoid infringement. Nor would it function except in conjunction with the wiper arm, not only because the wiper arm presses the fabric over towards the belt line, but because it holds it firmly in position. I am aided in this finding of equivalency by the drawings (Fig. 2) and the specifications. Defendants' contrary argument might have more validity if the shingle were "well above" the belt line, but it is not.

However, defendants subsequently, in most instances, abandoned the shingle as well as the cushion. Since some cars had been originally manufactured with cushions, such replacements would normally result in leaving a gap of up to ½ inch at the belt line. Defendants contend that there was then no seal, and hence, as to such replacements, no infringement. In respect to this I make a number of findings.

1. As already stated, such a gap was not the "seal" described in the patent. This is so even though in fact the trough on General Motors and Ford cars proved capable of carrying off all the water which could pass through such a gap.

2. Mackie-Duluk did not disclose that their device would work with a substantial gap at the belt line. They did disclose, however, that it would function if some water passed by the belt line.

3. The omission of the cushion did not reduce normal chafing, or increase the life of the top. It did save a slight amount of cost. Defendants did not originally omit it for that reason.

4. There is no advantage to, and no reason to strive for, a top with a gap at the belt line, except as an attempt to avoid the patent, and it resulted in an inferior product, particularly with respect to appearance.

5. The statement that defendants "strive for . . . a gap," means only that they do so in an attempt to avoid a claim of infringement. There is no basis for their claim that with respect to them plaintiff is attempting "to harass the unwary."

6. The wiper arm on Ford and General Motors cars was adjustable. It is a relatively easy matter to move it over, and eliminate the gap, if one was occasioned by replacing a fabric without a cushion on a car which had

had one originally. (Not all had.) This is done not infrequently.[10]

7. It is not at all true that the omission of the cushion, even if the wiper arm is not adjusted and a gap results, admits as much water past the belt line as would pass if, in addition, the wiper arm were removed.

8. If there were no wiper arm and no permanent affixing to the trough defendants' top would be useless (unless cut down and affixed by snaps to the outside of the tonneau).

9. It is not true, as defendants imply, if not directly assert, that Mackie-Duluk showed the seal they did in order to meet a requirement of the Patent Office.

10. Even if Mackie-Duluk had described a device effecting only an over-all seal, as is presently accomplished in a Mackie-Duluk car originally adjusted for a cushion, with a defendants' replacement without cushion, and not readjusted, I would still have found valid invention over Ackermans, etc., and the file wrapper indicates no reason to suppose the Patent Office would have thought otherwise.

I find that defendants' tops without cushions, even when made for cars which originally had cushions, come within the principle of being merely imperfect, but none-the-less substantial infringements.

I will hear the parties further as to relief.

(s) ALDRICH
U.S.D.J.

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[10] I cannot accept defendants' testimony that all car owners are content with a ½" gap. I base my finding on Pickard's testimony, inclusion at the test demonstrating practice, and also on my own observation that such a gap is conspicuously unattractive, and inconsistent with defendants' testimony of the general frequency of replacements because of convertible owners' interest in appearance.

INTERLOCUTORY JUDGMENT
December 15, 1958

ALDRICH, D. J.

This case came on to be heard in August, 1958 and was tried in open court on August 19 through 22 inclusive, and on August 25 through 28 inclusive, and following argument by counsel the court, in an opinion dated October 2, 1958, made certain findings and rulings which are hereby reaffirmed. Thereafter, counsel having been unable to agree fully upon a form of decree, the matter was further argued by counsel, and it is this day ordered, adjudged and decreed as follows:

1. That U. S. Letters Patent No. 2,569,724, issued October 2, 1951 to Harry A. Mackie and Stanley Duluk for: "Convertible Folding Top with Automatic Seal at Rear Quarter" hereinafter called the Mackie-Duluk patent, is good and valid in law, as to claims 3, 4, 5, 7, 8, 9 and 10 thereof.

2. That plaintiff, Convertible Top Replacement Co., Inc. is, by virtue of a territorial grant, possessed of the right, title and interest in and to said Mackie-Duluk patent for, to and in the Commonwealth of Massachusetts, together with all rights of action for past infringement accruing since December 30, 1953, of said Mackie-Duluk patent in said Commonwealth of Massachusetts.

3. That the defendants, comprising the corporate defendant Aro Manufacturing Co., Inc. and the defendants Mae Shapiro, George Shapiro, Marshall Shapiro, Harold R. Shapiro and John Raymond Hamlin, individually and as a co-partnership doing business as Aro Top Sales Company, have infringed or contributorily infringed claims 3, 4, 5, 7, 8, 9 and 10 of said Mackie-Duluk patent by making, selling, installing and inducing the sale, installation, and use of certain replacement top fabrics for convertible top automobiles designated by defendants as their

part numbers 134, 224, 225, 226, 227, 228, 231, 233, 234, and 509."

4. That plaintiff Convertible Top Replacement Co., Inc. recover of the corporate defendant Aro Manufacturing Co., Inc. and of the individual defendants Mae Shapiro, George Shapiro, Marshall Shapiro, Harold R. Shapiro and John Raymond Hamlin, damages adequate to compensate for the infringement, but in no event less than a reasonable royalty, together with interest and costs as fixed by the Court.

5. That this cause be referred to William R. Hulbert, Esq., as Master to ascertain and take and report to the Court an account of said damages. Inasmuch as there may be questions of law as to whether certain acts constitute infringement or contributory infringement in Massachusetts for which plaintiff may recover under its limited grant, the Master shall report such facts as will assist the Court in making the appropriate rulings. The Master shall, in the course of taking said account, take evidence to assist this Court in determining whether, and/or to what extent, replacement top fabrics of the type presently identified by defendants as their part number 232, shall be included in said account, and in the injunction to be issued out of this Court.

6. That a perpetual injunction be issued out of and under the seal of this Court restraining the defendant Aro Manufacturing Company, Inc., and the several individual defendants aforesaid, and each of them, as well as their officers, agents, servants, employees, and each of them:

(a) From directly or indirectly making, using or selling or causing to be made, used, or sold, in the Commonwealth of Massachusetts, structures embodying the invention disclosed and claimed in claims 3, 4, 5, 7, 8, 9 and 10 Mackie-Duluk U. S. Letters Patent No. 2,569,724;

(b) From directly or indirectly inducing infringe-

ment, in the Commonwealth of Massachusetts, of claims 3, 4, 5, 7, 8, 9 and 10 of said Mackie-Dubi U. S. Letters Patent No. 2,569,724; and

(c) From directly or indirectly selling, in the Com monwealth of Massachusetts, convertible automobil replacement top fabrics of the types presently identi fied by defendants under their part numbers 134, 22 225, 226, 227, 228, 231, 233, 234 and 509, or th equivalent of any of them.

7. That plaintiff recover from defendants the costs o the action, to be taxed by the Clerk. The compensatio of the Master, at the rate of $100. a day shall, unles otherwise agreed, be included in said costs. Prior to fin taxing the Court will determine whether additional cos shall be imposed pursuant to the provisions of 35 U.S. § 284.

By the Court,
(s) FRANCIS R. FOLEY
Deputy Clerk

(s) ALDRICH
U.S.D.J.

NOTICE OF APPEAL

Notice is hereby given that Aro Manufacturing Co., In and Mae Shapiro, George Shapiro, Harold R. Shapir Marshall Shapiro and John R. Hamlin copartners d/ Aro Top Sales Co. Defendants aboved-named, here appeal to the Court of Appeals for the First Circuit fr the judgment entered in this action on December 15, 1

ARO MANUFACTURING CO., INC., et
By: (s) DAVID WOLF
EZEKIEL WOLF, WOLF & GREENFIE
Attorneys for Defendants

January 13, 1959.

MEMORANDUM AND ORDER
February 16, 1959

ALDRICH, D.J.

Defendants' objections to interrogatories raise the perennial question of who shall do the work entailed in an accounting for damages in a suit for patent infringement. There are, of course, cases all around this question. Before making any specific rulings I think it is appropriate to view the frame of reference in which the question presently arises. In the first place, the case has already been fully tried, to the point of findings that the patent is valid and infringed. Defendants have appealed the issuance of an injunction. They have not been able, or willing,—I am not at all clear which—to post a supercedeas bond so far as damages are concerned. The matter of accounting has, accordingly, been referred to a master. Prior to the commencement of such hearing the plaintiff filed interrogatories addressed to the subject of damages. The defendants have objected to every one on the ground that the information is equally available to the plaintiff. This availability, so far as it exists, is the result of defendants now stating that plaintiff is free to examine defendants' books and records.

Until this moment plaintiff has never had access to defendants' books. On the other hand, defendants have felt free to testify to certain conclusions, then favorable to themselves, which they appeared to have drawn from their books. Thus defendant Harold Shapiro, testifying at the trial, stated in response to questions from his own counsel, (so that it is not to be assumed that he was unprepared for the inquiry,)

"Q. I further believe you indicated there are approximately 140 different models you offer for sale. Could you tell me with that background what percentage of the 140 models volumewise are constituted

by the seven models of which the plaintiffs complain? A. I would say today about 75 or 80 per cent.

Q. Of your total business? A. Yes."

One will note the word "today." This referred to August 21, 1958.

In December, 1958, when the question of damages became paramount, plaintiff filed a demand for admission of facts to the effect that the said testimony was true. Defendants answered as follows.

> "Denied.—The 75% to 80% figure mentioned by the witness was more applicable in 1956. At the time this answer was given, the witness had in mind figures which were estimated originally in 1956, when the percentage was substantially greater than at the time the testimony was given. It was not until an actual spot check, by the Defendants, of the actual percentage that it was fully realized that the percentage was much lower. The actual spot check indicates approximately 22% of the Plaintiff's manufacture comprises the seven models in question."

This answer was executed by the same Harold Shapiro. One will note the phrase "more applicable in 1956," and the statement that it was not until a spot check that he "fully realized" the percentage was "much lower." It is apparent from all of defendant's testimony that this percentage decreases as time progresses, and that no one knows, and knew, this better than Shapiro. Under the circumstances, in the light of this carefully phrased answer, which does not say that 75-80% was correct even in 1956, or that he "fully" thought so, I find it difficult to believe that Shapiro's testimony on the stand was not reckless, or worse.

Another matter. At the outset of the case plaintiff filed interrogatories in which it asked a number of questions about "any literature, advertising material or instruction

sheets relating to said replacement fabrics" issued or caused to be issued by any defendant. The defendants answered that none had been. At the trial plaintiff produced price lists which advertised particular tops for each make and model of convertible cars, and various other advertising material. It further showed that for each of three years particularly in question the defendants had had this advertising and descriptive material formally copyrighted. No satisfactory explanation, indeed, as I recall it, no explanation at all, has been offered to account for these answers to interrogatories.

Finally, I believe it is at least implicit in my opinion on the merits that there were various matters in defendants' briefs which clearly should not have been there.

In sum, the court approaches the present question with its mind sufficiently pre-occupied with thoughts about 35 U.S.C.A. §285 for the entire case to impede receptivity to defendants' contention that answering interrogatories will put them to expense. Defendants' frequently repeated argument that it is "up to plaintiff to prove its case," does not have a highly convincing ring coming from one who has shown that this contention adds the further qualification, "including the proving false of irresponsible statements made by the defendants."

The defendants are ordered to answer the following interrogatories within 20 days: 15, 16, 17, 18, 20, 25(a) and (b) and, to the same extent, 26, 27 and 28. They are ordered to answer the following interrogatories as promptly as possible: 19 and 23. No ruling at present is made as to the remaining interrogatories. If the defendants do not comply with the above order plaintiff may move for contempt proceedings.

(s) Aldrich
U.S.D.J.

DEPOSITION OF GEORGE SHAPIRO
August 28, 1956

* * *

[8] Q. Now, Mr. Shapiro, I again refer you to this schedule on the right-hand side of page 1, Plaintiff Exhibit S. You will note under the heading "Construction" you state that the top is "identical in design with original top." How do you make sure that the top is, in fact, "identical in design"? A. Well, identical in design I think is a broad statement which means it has to fit the contours of the body and where it has to be fastened to the top [9] equipment which is on it.

Q. Then when you use the term "identical in design" you actually mean that the top, that your replacement top fits as well as the original top and performs functions as well as the original top? A. That is right.

Q. You say your answer is Yes? A. That is right.

* * *

[15] Q. Were any tests conducted with the top that had both the cushion and flap eliminated to see how well it kept water out of the car? A. Yes, we made tests.

* * *

Q. Do you have personal knowledge of the results of these tests? A. Yes, they were good.

Q. Do you mean by that that they did keep water out of the car even without the cushion and the flap on it? A. Well I would say it did, yes.

Q. Then you would say that the top, even without the cushion and [16] without the flap, still functions effectively to keep water out of the car? A. That is right.

Q. You stated before that the elimination of the cushion and the substitution of the flap was made after you received a letter from Mr. Hall, and it was on the advice of your counsel? A. Yes.

Q. Who made the decision, actually, to remove the flap A. Harold Shapiro.

Q. That was his personal decision? A. Yes.

Q. Would you say it was because he felt the top worked just as well without the flap? A. Yes.

* * * *

[17] Q. Now, isn't it also true around 1950 General Motors came out [18] with a new convertible top which had an automatic sealing feature near the rear quarter so that people did not have to get out of the car to snap buttons or hook channels? A. Yes.

Q. Could you very briefly describe for the purposes of the record how this improved sealing feature worked in, say, 1950 and subsequent General Motors cars? What was it about the top which permitted this elimination of the function of snapping or channeling, or the like? A. The way it was secured to the body.

Q. Now, would you say it was because the fabric came inside the car near the rear quarter and secured to the body adjacent or beneath the belt line at that portion? A. Would you repeat that?

Mr. Pollock: Will the reporter read the question?

[Question read.]

Q. And was secured to the inside of the car beneath the belt line? A. Yes.

Q. In 1952, Ford, Mercury and Lincoln cars also came out with an automatic top which had this automatic sealing feature, and again that particular Ford top was secured near the rear quarter to the inside of the car below the belt line? Would you agree with this statement? A. Yes.

Q. Your answer is Yes? A. Yes.

* * * *

[19] Q. Now, the fabrics that came out in 1950 and subsequent in the General Motors cars had a cushion. Would you consider with your experience with convertible tops

that cushion was fairly important in the General Motors car? A. No, not necessarily.

Q. In the 1952 and subsequent Ford cars they had a cushion in them? [20] A. Yes.

Q. Would you consider the cushion in these Ford convertible tops was fairly important? A. Not necessarily.

DEPOSITION OF HAROLD R. SHAPIRO

October 4, 1956

[3] Q. Exactly what is a pattern maker, what are your duties? A. Well, among other things, pattern making is building a top from scratch on the existing frame of the car, putting it on paper, and getting it prepared for the cutters and to go into production.

Q. When you say building a top from scratch, do you mean by that that you make a specific pattern for a specific car and model, and that pattern is for that car and model? A. That is right, providing the same frame. If the same frame is applicable to another model, say Chevrolet and Pontiac, of course the [4] same top would fit both cars.

Q. Getting specific, in our case here? A. It is a custom tailored pattern. In other words, one top won't fit all cars.

Q. I see. In our case, your top 134, for instance, which is for the 1952, 1953 and 1954 Ford? A. And Mercurys.

Q. Excuse me. That particular top will fit those cars? A. Yes.

Q. But, as I understand you, it will not fit, for instance, General Motors cars? A. It was not specifically designed for those cars.

Q. Then you would say, as I understand you, your top No. 134 was specifically designed for the 1952, 1953 and 1954 Fords and Mercurys? A. Yes.

[7] Q. Now, Mr. Shapiro, I would like to invite your attention for a moment to some of the literature which was discussed with your brother, George Shapiro, and with Mr. Hamlin, during the previous depositions, and I merely invite your attention to the statements we mentioned at that time, and ask on whether or not you agree with the accuracy of those statements. In particular, I am referring to Exhibit A-B marked for identification, and you will note that under the heading "Design" it states that your various tops are custom tailored for each car and model. You have already used that term, in fact, in your earlier testimony. Would you agree that statement is correct, that your tops are custom tailored for each car? A. Yes, they are.

• • •

[8] Q. Under "Construction" you stated that the top is "identical in design with the original top." Do you agree with that statement? A. From outward appearance.

Mr. Wolf: Would you read that question again?

The Witness: From outward appearance, yes.

[Question read.]

Q. When you say outward appearance, what do you mean by that? A. Or design, not construction.

Q. You would say the shape, perhaps, is the same? A. That is right.

• • •

[13] Q. Your part No. 134 is for the 1952, 1953 and 1954 Ford and Mercury? A. Yes.

Q. Now, as I understand it, the part No. 132 which is for the 1951 Ford could not be installed, then, on a 1952, 1953 or 1954 Ford? A. We would not.

Q. I see. Is that because of some difference in the shape or construction? A. Yes.

• • •

[14] Q. As I recall your statement, you, being the pattern

maker, made definite patterns for each of those particular models? A. That is right.

Q. And I assume they differed again from the No. 134? A. Yes.

Q. So that each of these particular tops were made for very specific cars? A. Yes.

[18] Q. Now, I would like to ask you, if I may, about these various patterns that you make, and so forth. As I gather from reading the brochures, the main purpose in having so many different part numbers for all these different cars is that these various car frames do differ from one another, and they all require special shaped and designed tops to fit on a specific frame; is that correct? A. That is correct.

Q. Therefore, these various number parts designate specific tops made for specific cars? A. That is right.

Q. Just as your part No. 134 is made for the 1952, 1953 and 1954 Ford? A. That is right.

Q. And Mercury? A. Yes.

Q. Now, just as background material, I invite your attention to an exhibit which has been marked for identification as Plaintiff Exhibit S, and this particular exhibit is already the subject of certain requests for admission which have been answered, and you will note that on the first page of this particular brochure in a sort of certificate arrangement, it states here, "Aro tops have an accurate pattern for every convertible [19] model from 1928 on, insuring custom tailoring and precisional fit." A. Yes.

Q. Would you say that is an accurate statement? A. Yes.

[35] Q. Why is it you had to make a special pattern for the 1955 Ford when you had your parts 134 for 1952, 1953 and 1954? A. The shape of the car and the size of the car and the fastening of the car. It is different.

[37] Q. Perhaps I can clarify it. I realize the question is perhaps vague. Would you agree, first of all, your number part 134 was designed to be installed in a 1952, 1953 or 1954 Ford in a manner quite similar to the way the original equipment was installed on that car in that it was fastened to the trough, fastened on the rear, fastened to the pillar, and so forth? A. Yes.

[43] *Cross-Examination*

[49] XQ. Now, will you please summarize those cars which in their original manufacture used wiper arms of the general type shown in the patent owned by the plaintiff and subject to the present civil action? A. 1952, 1953 and 1954 Ford and Mercury, and including 1955 Lincoln. Is that plain enough?

XQ. 1952 to 1954 Ford and Mercury, and 1955 Lincoln? A. Yes. [50] This is just the wiper arm?

XQ. That is right. A. 1950 to 1953, inclusive, General Motors and including 1954 Chevrolet and Pontiac.

[68] XQ. In that particular shingle construction, I take it the shingle rests on top of the body line and not between the wiper arms? A. Body line, or pulled down tight resting on top of the body line.

XQ. In those structures where the shingle is above the body line [69] and water runs slowly down the shingle, is it possible for the water to follow the contour of the shingle, go around it and go to the trough? A. Not generally. I have watched it in my own car.

[78] Mr. Pollock: I wanted to clarify the question. The witness has testified, as I understand it, that even if they would put a top, that top 134 onto a Ford car without a

cushion or a flap, it would still keep the water out of the car? A. It is still watertight. The material is still one piece going down to the trough.

Mr. Pollock: It is still watertight?

The Witness: Oh, yes.

DEPOSITION OF HAROLD ROBERT SHAPIRO
February 20, 1957

[2] The purpose of the deposition is to make certain tests with reference to certain replacement top installations manufactured by the defendant. These tests will be conducted with reference to two cars, a 1953 Ford and a 1953 Oldsmobile. Both of these cars have had their convertible top fabrics replaced with a replacement installation of the defendant. It is my understanding that these replacement tops have been on the cars for some time.

The tests in essence will be as follows: We will conduct tests in which we will demonstrate and take photographs of two automobiles with the wiper arms portion of the construction in place and the tops in a raised position. Also we will take photographs for comparison purposes with the wiper arms removed. In both instances I will ask the witness to demonstrate by suitable means the space which occurs between the fabric and the body line of the car. We will also run water over the tops of both [3] of these installations to demonstrate the effect of water passing over that portion of the car between the body line and the fabric.

I will also ask the witness to identify and clearly mark certain exhibits which comprise the entire kit or unit which the defendants manufacture and sell for replacement parts installation on the Ford car, and also, I think, on a General Motors type car.

I will also ask them to produce comparable kits which they sell for installation on cars which the plaintiff has indicated by interrogatory do not infringe the claims of the patent in question. Specifically I would like to have produced and compared a kit for a 1951 Ford.

* * *

Q 1. [By Mr. Wolf] Mr. Shapiro, will you please give your name and address? A. Harold R. Shapiro, 5 Cynthia Road, Newton Center, Massachusetts.

* * *

[4] Q 3. With respect to the two model cars on which we will conduct demonstrations, will you please identify them? A. One car is a 1953 Ford and the other is a 1953 Oldsmobile Super 88 Convertible.

Q 4. Will you please tell me what type of convertible tops are on those two cars? A. The tops that are on both cars were made by the Aro Manufacturing Company and installed by our own personnel.

Q 5. First taking the Ford automobile, how long ago was that top installed? A. That top was put on early last fall.

Mr. Pollock: By "the top," is that a part No. 134 such as we have been identifying in the other depositions?

The Witness: Yes. Exact in its structure as we are making as of today.

[5] Q 6. With respect to the Oldsmobile automobile, will you tell me first what part number you are using on it? A. That is part No. 231.

Q 7. When was that top installed? A. That top was installed late last winter.

Q 8. Will you describe in connection with the Ford top, 134, whether or not it has a cushion or frankfurt, as you might call it, or, alternately, a shingle of smooth surface between the fabric and automobile body line of the car?

A. On the part No. 134 the construction is a smooth piece of fabric running between the body and the wiper arm.

Mr. Pollock: Down to the trough?

The Witness: Down to the trough and fastened with prongs and screws.

Q 9. With respect to the Oldsmobile, will you tell us, please, the type of fabric construction between the wiper arm and body line of that car? A. The construction is really a shingle above the body line and a single piece of fabric between the body and wiper arm.

Q 10. What do you mean by shingle? A. Shingle is a smooth roll of material approximately a half inch in diameter, stitched in a certain way as to act as a bumper for any water.

[6] Mr. Pollock: You mean a deflector?

The Witness: A deflector for any water coming down the side quarter material and deflecting it away from the body.

Q 11. Now, since the installation on both of these cars, can you tell me whether you have altered or tampered in any respect with either of the automobile convertible top equipment? A. No.

[Taking of the deposition adjourned to another part of the premises.]

Mr. Pollock: Would Mr. Shapiro please identify where we are, and so forth?

The Witness: You mean this room?

Mr. Pollock: Yes.

Mr. Shapiro: I will locate it in the Aro Top Sales trim department where a number of tops are installed on cars.

Mr. Pollock: It is sort of a garage, isn't it?

The Witness: That is right.

* * *

Q 12. Now, Mr. Shapiro, we are now looking at an automobile; I take it this is— A. A 1953 Ford. No. 134.

[7] Q 13. All right. I think it would be a good idea to have a photograph taken of the top and identified as Exhibit 4. Will you please indicate whether or not the wiper arm is in position in this particlar model? A. Everything is in position the way the car came from the factory.

Q 14. From the factory? A. The framework is not tampered with at all.

Q 15. Will you indicate what is the rear quarter?

[The witness indicates.]

Q 16. On this Exhibit 4, Mr. Shapiro, would you please indicate that portion of the car which indicates—what is that [indicating]? A. This is the rear quarter side quarter section.

Q 17. —the rear side quarter section?

[The witness indicates.]

[Photograph EXHIBIT 4 is taken by the Photographer.]

Q 18. In Exhibit 4-A, will you please insert, if possible, your small finger into the space between the fabric and the body line of the automobile?

Mr. Pollock: Would you insert it as far as you can?

[Witness indicates.]

[Photograph EXHIBIT 4-A is taken by the photographer.]

[8] Q 19. Could you estimate the space, Mr. Shapiro, between the fabric and the body line of this particular model? A. I would say one-half inch.

Mr. Pollock: Could you get a ruler?

The Witness: Yes.

A. [After measuring] About three-eighths of an inch.

Mr. Pollock: Mr. Shapiro, you are measuring now and would you measure at various locations?

The Witness: At the extreme rear the dimension would be 5/16ths, and at the extreme front it would be 5/16ths, and at the center it would be 3/8ths.

Q 20. Now, Mr. Shapiro, could you remove the wiper arm from this particular model? A. I will get one of my trim men to do that.

Mr. Pollock: Would the reporter note that one of Mr. Shapiro's helpers has disconnected the wiper arm which was in place during the taking of Exhibit 4 and Exhibit 4-A and that it has now been displaced and it is loose?

Q 21. Mr. Shapiro, will you please indicate what has transpired since Exhibit 4 and 4-A have been taken? A. Our trim man has disconnected the wiper arm from the body.

Q 22. Where is the wiper arm located? A. The wiper arm is located adjacent—parallel to the body line, connected [9] front and back.

Q 23. Would you please stand in substantially the same position you were in when picture Exhibit 4 was taken?

Mr. Wolf: I will ask the photographer to take a picture of this as Exhibit 5.

[Photograph Exhibit 5 is taken by the photographer.]

Q 24. With your ruler will you please measure the depth now without disturbing the fabric and indicate to the reporter the measurements you have taken? A. The measurements are the same.

Mr. Pollock: Really?

The Witness: It was 3/8ths on the other one.

Mr. Pollock: How about at the back?

The Witness: Just a hair over [measuring].

Q 25. Will you please indicate so the reporter can record it? A. The measurements are the same.

Q 26. Now, without disturbing the fabric will you please insert your finger in the same position that you had it before? Or will you please insert your finger as far as you can without moving the fabric?

[The witness does so.]

Mr. Wolf: Now will you take a picture and identify that as Exhibit 5-A?

[Photograph Exhibit 5-A taken by the photographer.]

[10]. Q 27. Now I will ask that you re-install the wiper arm in the same position that it was before. At the request of Mr. Pollock, to make the record complete, I will ask you to insert your hand as far as you can with your fingers, as far as you can, with the wiper arm removed. A. Pushing the material?

Q 28. Yes, pushing the material.

Mr. Pollock: Put your hand down as much as you can.

[The witness does so.]

* * *

Mr. Wolf: I will ask the photographer to note that as Cross-Exhibit 1.

[11] [Photograph Cross-Exhibit 1 is taken by the photographer.]

Q 29. Now, Mr. Shapiro, will you please measure the space as well as you can that now appears? A. It is a half inch at the point where my hand was in as far as it goes.

Mr. Wolf: I would like the court reporter to note that the top has not been touched since Mr. Shapiro has removed his hand.

Mr. Pollock: Is the wiping arm back in place?

The Witness: No.

* * *

A. [Continuing] At the point where my hand was inserted and the material pushed in is one-half inch.

Mr. Pollock: In other words, I just want to make this point clear, in other words, you are saying without the wiper arm in there you put your hand in and removed it so the top is sprung back by its inherent resiliency and it is now a one-half inch space?

The Witness: That is right.

Q 30. Now, will you put the wiper arm back in place?

• • •

[12] Q 31. Mr. Shapiro, now indicating the rear quarter in the area above the wiper, in the area above that portion of the fabric in which the wiper arm is located, will you please indicate whether or not you find any substantial difference between the tension of the fabric whether the wiper arm is or is not in place? A. I will have to wait until the wiper arm goes back.

Q 32. Will you test it now? A. I have tested it.

Q 33. Will you please replace the wiper arm?

[The wiper arm is replaced.]

Q 34. Now, the wiper arm has been replaced; will you please examine it in the same location? A. I would say very little or no amount of looseness.

• • •

[13] Q 36. Are you saying that comparing the top with the wiper arm in place and without the wiper arm in place there is a greater looseness with it not in place or there is no substantial difference? A. No substantial difference.

Q 37. Apply it from this point [indicating], Mr. Shapiro. Do you occasionally test the effect of water on convertible tops when they are installed? A. Very often.

Q 38. How do you normally conduct such tests? A. By filling a pail with water and saturating a sponge and squeezing it above the belt line and watching the water drain out through the drains, and to be sure that none of it goes in the car.

Q 39. Have you found that test which you have just described to be effective? A. Yes.

Q 40. Would you please take a sponge and conduct that same test, applying the water above the body line of the car at approximately an area maybe a foot above the body line [14] directly at the center of the rear quarter of this particular model?

Mr. Wolf: And I would request the photographer take a picture of this, after the water has passed this point [indicating], which will be Exhibit 6.

[The witness indicates.]

[Photograph EXHIBIT 6 is taken by the photographer.]

Mr. Wolf: For the purpose of the record I would like to indicate that a few drops of water had fallen on the fender of the car as Mr. Shapiro was applying the sponge to the top, and while he was moving the sponge over the fender and those drops of water were removed prior to the taking of the photograph.

Q 41. Now, Mr. Shapiro, will you please indicate where the water which ran down the top flowed to? A. It flowed down the top into the drain gutter inside the body line and consequently out through a hole at the bottom of the body put there for that particular purpose.

Q 42. I take it the puddle of water which appears below the car at approximately a point underneath the rear seat or rear floorboard is the water which has drained from the top? A. Yes. There is also one back here [indicating], but the car is pitched in such a way that it did not—

[15] Q 43. Do you see any water which has flowed over the body line and over the outside of the fender? A. No.

Q 44. I would like to turn to the other model car which we have here; will you please identify this? A. This car is a 1953 Oldsmobile 88 Convertible, Aro Part No. 231.

Q 45. Will you explain the differences between this structure and the structure we have just considered? A. The difference between this model is that it incorporates a shingle and a wiper arm.

Q 46. What is the function of the shingle? A. The shingle is a deflector of water, deflector of water—well, a deflector of water, period.

Mr. Pollock: What is it deflected from and to?

The Witness: It is a deflector of water coming from the top to entering the car.

Mr. Pollock: You mean it keeps it from entering the car?

The Witness: That is right.

Q 47. With respect to this shingle, can you please tell me its location? A. It is located at the rear side quarter, at the bottom of the rear side quarter from the rear of the side quarter window to where the top tacks on the outside of the car.

[16] Q 48. Is it above or below the wiper arm or on a level with the wiper arm? A. I would say it is a little above the wiper arm.

Q 49. Could you tell me whether any portion of that shingle is located between the wiper arm and the body line of the car? A. No portion is between the wiper arm and the body line of the car.

Q 50. Will you please take a ruler, if necessary, and estimate the space between the body line and the fabric in a position just below this shingle? A. I would say a distance of about 1/8th of an inch. It is a quarter there [indicating], and about 4/16ths—3/16ths in the front and 1/4 inch in the rear.

Q 51. Could you tell me whether or not that space is sufficient to permit free passage of water which might roll past the shingle? A. Yes.

Q 52. I just asked you what the function of the shingle was; will you tell me whether or not the shingle functions at all to form a watertight seal? A. No.

Mr. Wolf: I would like the photographer to please take as Exhibit 7 a photograph of this particular top with Mr. Shapiro indicating the shingle.

Mr. Pollock: Will you put your finger on it?

[The witness indicates.]

[17] Q 53. I would prefer to have your finger on it.

[The witness indicates.]

[Photograph EXHIBIT 7 is taken by the photographer.]

Q 54. Now, Mr. Shapiro, can you hold that shingle up in such a position as to indicate and illustrate the space contained between the fabric and the body line? A. Yes [indicating].

Mr. Wolf: I will ask the photographer to please take as Exhibit 8 a photograph.

[Photograph EXHIBIT 8 is taken by the photographer.]

Q 55. Now, Mr. Shapiro, I will ask you to have the wiper arm on this particular model removed.

* * *

A. The wiper arm is removed.

Mr. Wolf: I will ask the photographer to take as Exhibit 9 a view substantially the same as Exhibit 7.

[18] Q 57. Will you put your finger on the shingle in the same manner you had it before?

[The witness indicates.]

[Photograph EXHIBIT 9 is taken by the photographer.]

* * *

Q 58. Will you please test the area above the wiper arm of the fabric and tell me if you notice any substantial difference with the wiper arm removed from the tension and appearance when the wiper arm was in place? A. There is no difference in appearance.

Q 59. How about any substantial difference in tension? A. I would say by testing here [indicating] there would not be. If I tested it here [indicating] there would be a little.

Mr. Pollock: You say there would be a little difference

in tension when you tested down near where the clamp should be?

The Witness: That is right.

[19] Mr. Pollock: Did you conduct that same sort of test on the other car?

The Witness: Yes.

Q 60. Would you consider that difference to be substantial or not? A. No.

Q 61. No. A: No.

Q 62. Mr. Shapiro, with respect to applying water to this particular model, could you tell me whether or not water which may fall on the car and be driven by a driving wind storm or rain falling at an angle, would that water pass between the fabric and the body line? A. Yes.

Q 63. Do you have water to demonstrate? A. Yes.

Mr. Wolf: Will you take a picture now of Mr. Shapiro applying the sponge test to this particular model?

[Photograph EXHIBIT 10 is taken by the photographer.]

Q 64. Mr. Shapiro, would you please examine the fabric and lift the shingle, and will you tell me whether or not water has passed down under the shingle and between the body line and the fabric? A. Yes.

Q 65. Where did that water go to? A. Out through the normal drains of the car and out through the body, the bottom of the body.

Mr. Wolf: For the purpose of the record and perhaps [20] to save Mr. Pollock from some questions later on, I will indicate that not all the water passed between the fabric and the body line, but some of the water was shed off the shingle and outside of the car on the outside of the fender. Is that a fair statement?

Mr. Pollock: Yes. Would the witness agree to that statement, too?

The Witness: Yes, depending on the rate of flow.

Mr. Pollock: What do you mean by that?

The Witness: If I squeeze the sponge fast I could make it so nothing would go in. If I squeeze it slow, more will go. Do you see?

Mr. Pollock: As the volume of flow increases, less and less gets inside?

Mr. Wolf: I would like to indicate for the purpose of the record that the witness took a sponge and squeezed a large quantity of water from the sponge on to the car but I would also like to note that there was a substantial quantity which did pass between the body line and the fabric.

Mr. Pollock: I object to the term "substantial quantity." I will admit that there was some water which got in there, but I cannot compare it.

Q 66. Would the witness please indicate? A. Let us do it [21] again [indicating]. At least as much went in as went out.

Q 67. With that added quantity? A. Yes.

Q 68. Would you please indicate on the floor the pool of water which has accumulated from water passing inside of the car and between the fabric and body line? A. There is a drain here [indicating] and here [indicating] and also one down here [indicating], but these are normally the same drains if your windows are up the water goes through and goes through the drain.

Q 69. Will you indicate those spots? A. The main drain in this particular demonstration is located below the rear side quarter window at the bottom of the body.

Q 70. Could you tell me whether or not you would conclude from these two demonstrations that these particular cars which we have examined have or have no watertight seals between the fabric and the body line? A. In our top manufacture?

Q 71. Yes, these particular cars. A. In our manufacture they are not watertight seals, neither of the cars.

Q 72. Would you say these are true representations of all the tops that you make? Could you say that? Is it true or not? A. This is a true representation of all tops we make where they are fastened inside of the [22] car, when they are fastened inside of the car.

* * *

Q 73. [By Mr. Wolfe] Mr. Shapiro, I will ask you to have the wiper arm removed or loosened from each side and then I would like to have you lower and raise the top of each car. First, with respect to the Oldsmobile. For the purpose of the record, I would like to indicate that the wiper arm was not completely removed, because it is much easier merely to make it ineffective by loosening one end of it.

[23] [The top is lowered.]

Q 74. Now, will you raise it?

[The top is raised.]

Q 75. Mr. Shapiro, would you please examine the top now and indicate whether or not you notice any substantial differences between the position and condition of the top when it was in its raised position with the wiper arm removed or loosened, before being lowered and now after it has been lowered? A. There is no difference.

Q 76. Would you conduct the same experiment with the Ford automobile?

[The top of the Ford automobile is lowered.]

Q 77. Now, will you raise it, please?

[The top of the Ford automobile is raised.]

Q 78. Now, will you please make a comparison similar to that made in connection with the previously conducted tests? A. The difference is 1/8th of an inch difference in the spacing.

Q 79. I am sorry; I think you misunderstood my question.

Mr. Pollock: I would like to clarify what he says. You say that with the wiper arm off there is 1/8th of an inch difference in spacing between the fabric and the belt line?

The Witness: Let me just give you the measure. [24] 3/8ths in the center, 1/4th in the front, 5/16ths in the rear.

Q 80. You have just given us the spaces at various positions between the fabric and the body line with the wiper arm removed? A. Yes.

Q 81. After the top has been lowered and raised again with the wiper arm removed? Is that correct? A. That is correct.

Q 82. If my memory serves me correctly, the space is now smaller than it was with the wiper arm in position; is that correct?

Mr. Pollock: Well, I would agree that that is what the testimony would seem to indicate, that with the wiper arm removed there is a smaller space than with the wiper arm in place.

Mr. Wolf: This particular experiment would seem to indicate that.

Cross-Examination by Mr. Pollock.

[25] XQ 85. Would you take the same ruler and put it up against the top and push it in as far as you can and tell me what the measurement is? In as far as you can. A. [Measuring] 1-1/2 inch.

XQ 86. In other words, you can push it in 1-1/2 inch with the wiper arm removed and, as I recall, with the wiper arm in place, it was about 3/8th of an inch? A. It would be an inch and a half in the center, an inch and a half in the rear, an inch and a quarter in the front [measuring].

XQ 87. It was 3/8ths of an inch— A. In its normal position.

XQ 88. So actually when the wiper arm is in place it does help to push the fabric out or keep it in place, doesn't it? In other words, you could not possibly have pushed the fabric in the way you have just now if your wiper arm were in place? A. That particular section of the top is not meant to be pushed in.

• • •

[26] XQ 93. Obviously there has been a lot of discussion as to whether or not the top was distrubed or not when we were taking these measurements. It is pretty easy to disturb the fabric in the rear quarter and change the dimensions? A. Yes, but if comes back to its original position.

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Mr. Wolf: I would like the reporter to note that when the witness and Mr. Pollock were talking about disturbing and demonstrating the disturbing, they were physically forcing the fabric in with their hands.

• • • •

[27] XQ 95. I have just disturbed the fabric now. Would you measure the dimension near the center? A. 7/8ths of an inch. Three-quarters.

XQ 96. With the clamp in place it could not possibly be over 3/8ths of an inch at this point; isn't that right? A. That is correct.

XQ 97. So certainly with the clamp in place it does tend to push the fabric out and hold it in a certain spacing and even though there is some spacing, it is certainly no more than 3/8th of an inch; isn't that right? A. Yes.

• • • •

[28] XQ 100. I think our discussion has taken a minute or so; would you measure it again now at that center part? A. I would have to examine it down below to see if it was

pulled by the screws. By exerting a pressure there it could have been torn stretched from the securing screws below.

XQ 104. We don't know whether it was torn stretched before we started to measure before? A. It was not torn stretched. If it was torn stretched there would have been a wrinkle in the top.

• • •

XQ 105. All right. Would you get up and measure this thing now? A. Half an inch at the widest point. It is half an inch at the very widest spot.

XQ 106. How about the very narrowest spot? A. At the very narrowest spot it is 1/8th of an inch.

[29] XQ 107. 1/8th? A. 1/8th.

• • •

[32] XQ 123. Well, in a normal rain storm wouldn't some water bounce on the fabric? It certainly is not going to run gently down the top if you are out in a rain storm driving a car? A. That is right, but I say this test is highly superlative, because you would never simulate rain with the amount of water we are putting in one spot.

XQ 124. You would not simulate rain by squeezing a sponge? A. That is right. But we could put these cars outside and simulate rain and use a hose on them.

• • •

[33] XQ 126. That might be. The only point I wanted to make was that when you use a sponge you are not really simulating rain?. A. No, we are just showing direction of flow.

Mr. Pollock: Would the reporter note that the photographer had to go out for more film and since he has returned I will pick up on the Oldsmobile at the point we were working on several minutes ago. I believe Mr. Shapiro had put his hand down with the wiper arm removed. Apparently the man who was working with Mr. Shapiro has gone out to lunch and, therefore, if you consider it a fair

test, I think the wiper arm is still on on the other side, so could we take a picture on the other side with the wiper arm in place?

The Witness: We can put the wiper arm back on.

• • •

[34] XQ 130. Now, Mr. Shapiro, would you put your finger or hand as far as you can between the body line and the fabric when the wiper arm is in place and I will ask the photographer to take a picture? I think you put your hand down in the middle. Put it as far as you can.

• • • •

XQ 131. Mr. Shapiro, in both cars you have put your hand down as far as you can with the wiper arm removed and with the wiper arm in place; is that true? A. Yes, that is true.

XQ 132. And I think you will agree that with the wiper arm removed you could put almost your whole hand down but with the wiper arm in place you could perhaps one-third of one finger? Is that correct? A. That is [35] correct.

• • •

XQ 137. Isn't it true that the reason you could not put your hand further down in the car when the wiper arm was in place was because the wiper arm was in place? In other words, it was pushing the fabric over to a position where you could not put a lot of your hand in? Isn't that true? A. Not the pressure on the material, but the fact my finger was going into the car and then pushing the material against the wiper arm, but there is no pressure from the material on the wiper arm [36] if I did not put my finger on it.

• • • •

XQ 142. You say it brushes it? A. It might brush it.

XQ 143. You are talking about the wiper arm on a car having a No. 134 top? A. Yes.

XQ 144. Well, you say it might brush it; isn't brushing touching? A. Well, in our previous tests we raised and lowered the top without the wiper arm installed and it showed no ap reciable difference in the looks or fit.

[37] XQ 145. When the wiper arm is installed isn't it true by the very fact the top material in your 134 goes down between the belt line and wiper arm there is not much room in there and isn't it true as you raise the top the wiper arm is brushing against the fabric? A. The primary function of the wiper arm is to push against the fabric and make weathertight seal. It has nothing to do with the raising and lowering of the top.

XQ 146. I am not concerned with the nature of the seal once the top is raised. It is true, of course, is it not, that with no cushion we get an inferior seal with what it would be with the cushion? Isn't that true? A. I would say that you have a better function than with a weathertight seal. Most 1954 Fords that I have noticed had a bunching or a tearing effect on the outside fabric because the seal was too tight, and consequently there was friction between the wiper arm and body line.

XQ 147. The top will weather better, maybe last better if the wearing tension is not there? A. And looks better.

XQ 148. And maybe look better. But I think it is your contention that you do not get as good a seal, using the word seal for whatever purpose we can use it? A. Weathertight.

XQ 149. Whatever seal you get up here [indicating] is not a watertight [38] seal? A. That is correct.

XQ 150. It is something less than a watertight seal? A. That is correct.

XQ 151. Now you say when you are raising this top the wiper arm might brush against the fabric? A. I think the thing to do is put the top up and down and see.

XQ 151. All right. Can we do that? A. Yes. Do you want to go in and look at it and I will lift the top?

[The witness raises and lowers the top.]

XQ 153. Can you see the fabric in there? Isn't it true that the wiper arm is touching right against the fabric? A. Oh, the wiper arm is touching right against the fabric, because we have such a small space between the wiper arm and the body, but we have done this without the wiper arm and it showed no difference.

• • •

XQ 155. From your observations I believe you pointed out during this raising and lowering that there was a fairly small space between the outer surface of the wiper arm [39] and the inside surface of the car and the fabric fitted between that small space? A. That is true.

XQ 156. Isn't it also true that as the top was raised, we actually saw the wiper arm wiping against the fabric? A. In this instance, yes.

XQ 157. Now could we do the same thing with the Ford top or would you agree that the same thing would happen? A. I would agree the same thing would happen.

• • •

XQ 159. Isn't it true that the wiper arm and fabric are touching each other directly as this top was raised? A. Yes.

Mr. Wolf: For the purpose of continuity I would like to ask a question at this point, and that is; Is there any specific function that the wiper arm performs during this particular raising and lowering procedure which Mr. Pollock was just questioning on?

[40] The Witness: As far as our manufacture of this model top, it serves no function whatsoever.

XQ 160. Now, just to clarify the previous testimony. On this Oldsmobile with the top No.— A. 231.

XQ 161. —231 on it, we observed that as the top was raised and lowered the wiping arm, whatever its function

in this particular case, and we are not concerned with its function, but it is quite clear from your observation that the wiper arm and fabric were actually touching one another as the top was being raised? A. That is true.

XQ 162. You say the same situation has occurred in the Ford automobile with your top No. 134 on it? A. Yes.

Mr. Wolf: I would like to have some photographs taken of the inside to show the construction. May we do it now?

Mr. Pollock: Surely.

Mr. Wolf: I would like to have the photographer take as Exhibit No. 11, I believe, a photograph of the interior of the Oldsmobile car with the top down, and I would ask Mr. Shapiro to indicate with one hand, if possible, the folding bows and with the other the wiper arm, the photograph being taken from the front side of the car looking towards the rear quarter.

Will you please indicate for the purpose of [41] clarity? And we will take two photographs, first, Exhibit 11, with Mr. Shapiro indicating the wiper arm structure.

[Photograph EXHIBIT 11 is taken by the photographer.]

I would also like to state for the purpose of the record that the rear window has been removed for the purpose of taking this photograph, and the photograph is being taken from the trunk area of the car through the window.

Mr. Wolf: Now will you please place your finger between the fabric and the wiper arm?

Mr. Pollock: When you are doing this, Mr. Shapiro, isn't it true that you are pushing the fabric away from the wiper arm? And, perhaps for clarity, before you put your finger in there, isn't it true that in this Photograph 11 that was just taken the wiper arm and fabric are touching one another in there?

The Witness: I would say so.

Mr. Wolf: Now, will you please place your finger be-

tween the wiper arm and the fabric? Is that about as far as you can get it?

[The witness indicates.]

[Photograph EXHIBIT 12 is taken by the photographer.]

Mr. Pollock: And in Photograph 12 you have inserted [42] your finger in and pushed the fabric away from the wiper arm; isn't that right?

The Witness: Yes.

Mr. Wolf: Now I would like as Exhibit 13 to take a picture from the same position with Mr. Shapiro indicating the folding bow and associated mechanism. Can you indicate the folding bows? Will you indicate the folding bows closed and the wiping arm?

The Witness: It would be this structure right here [indicating].

Mr. Pollock: In order to save a picture, you are indicating the folding bows with your left hand and could you also put your right hand on the trough, which, I believe, is exposed at least in part, so your right hand indicates the trough and the left hand indicates the folding bows?

I would like the photographer, if he can, to get pictures in of the fasteners to the left of Mr. Shapiro's right hand which show where the material is fastened to the trough.

[Photograph EXHIBIT 13 is taken by the photographer.]

Mr. Wolf: I would like to take some pictures with respect to the Ford automobile, please.

The Witness: This top was placed on it June, 1956.

[43] Mr. Wolf: Mr. Shapiro said this top was placed on it June, 1956. Will you please indicate that was a correction from a previously indicated date of installation, I believe.

In connection with this particular car, Mr. Shapiro, will you please examine the interior and indicate whether you

see any traces of water in the inside as a result of the quantities that have been placed on it with a sponge test?

The Witness: There is no leakage whatever.

Mr. Wolf: I will ask the photographer to take a picture from the trunk area of this car with Mr. Shapiro indicating the wiper arm with his right hand and with his left hand I would like him to indicate the trough or place where the trough is located.

The Witness: The trough is on the back side of the material.

Mr. Wolf: Will you indicate the location of the trough and the point at which the fabric is attached to the trough?

The Witness: These screws are right into the trough.

[44] Mr. Wolf: Indicate with your left hand the trough and with your right hand point to the wiper arm.

[Photograph EXHIBIT 14 is taken by the photographer.]

Mr. Wolf: Now will you please indicate the folding bow mechanism and I will ask the photographer to take this as Exhibit 15? Perhaps you could save a photograph here. Can you insert your finger, your left hand—no, I don't think it shows. Just indicate the folding bow mechanism.

[Photograph EXHIBIT 15 is taken by the photographer.]

Mr. Wolf: Now can you take your right hand and place it between the fabric and the wiper arm?

[Photograph EXHIBIT 16 is taken by the photographer.]

XQ 163. And again you are pushing the fabric away from the wiper arm, isn't that correct? When you are inserting your finger in, isn't it true you are pushing the fabric away from the wiper arm? A. Yes.

XQ 164. And does the fabric actually touch the wiper

arm before you put your finger in? A. In the front i does not; in the rear it does.

XQ 165. You mean the front of the wiper arm and th rear of the wiper arm? A. That is right.

XQ 166. All right. Incidentally, while you are inside th car, Mr. Shapiro; is there a body panel inside this car? [45] A. What do you mean by body panel?

XQ 167. Is the trough supported on a body panel? A. Th trough is welded to the body.

• • •

XQ 174. Then there is a panel inside the car for sup porting the trough, isn't there? A. I don't know what it was put there for.

XQ 175. There is a panel that does support the trough whatever [46] its other functions might be? A. It is true part of it becomes the panel and also the place to secure the side quarter to.

• • • •

XQ 176. Now, for the record, a moment ago we were in the trim shop of Aro Top Sales? A. The trim room.

XQ 177. The trim room; and this is now your office that we are in? A. This is my office.

XQ 178. Is this part of Aro Top Sales? A. It is Aro Manufacturing.

XQ 179. And where does one leave off and the other be gin? A. Anything to do with the making is Aro Manufacturing and anything to do with the selling is Aro Top Sales.

• • •

[47] XQ 181A. Starting at the very beginning of the list and I think the first item is 122, over at the extreme upper left-hand corner, would you look down through all the model numbers there and list any of your numbers that were made for cars having wiper arms on them? A. 134, 30 224, 226, 239, 231, some 232's.

Mr. Wolf: Will you indicate what you mean by "some 232's"?

The Witness: In the 232 covers, 1953 and 1954 Chevrolet and Pontiac, all the 1953 had wiper arms and only some 1954's had wiper arms and some had a stationary [48] plate that did not fold with the top and was secured to the body with screws. That was the late 1954.

XQ 182. So you have listed some 232's? A. Yes.

XQ 183. Would you continue? A. 234. That is all, to my knowledge.

* * *

[49] Mr. Pollock: For the purposes of the record, three boxes have been brought into the room, which apparently contain convertible top fabrics, identified by various numbers appearing at the ends of the boxes and also identified by various model numbers for cars on which they are to be used. I have not examined the contents of these boxes, but I assume that they do contain the tops and various components for installing the top on the cars which are designated on the ends of the boxes, and I would be willing to stipulate that these represent typical boxed fabrics and other components such as are manufactured by Aro Manufacturing Company for use on convertible automobiles.

Mr. Wolf: Would you be willing to further stipulate that these particular boxes are representative of the kits which are manufactured and sold for replacement top installation by Aro Manufacturing and Aro Top Sales for the enumerated models which Mr. Shapiro has just listed?

Mr. Pollock: Yes, I will be willing to stipulate to that with the understanding that I do not stipulate to any special meaning of the word "kit." I do not [50] know what a kit is and if it is meant to have some special meaning, I cannot agree to any special meaning.

[Discussion off the record.]

Mr. Pollock: It is further stipulated that these boxes contain complete convertible tops ready for installation with all of the necessary fittings required for such installation.

The Witness: That is right.

Redirect Examination by Mr. Wolf

Q 190. Will you please indicate, Mr. Shapiro, whether or not these three boxes are the type of product which you referred to in your previous stipulation as a kit? I believe when you testified some months ago you indicated that certain kits were being sold by Aro; are these the kits to which you referred? A. These are the kits, yes.

[52] Q 195. Would you please open up the part No. 1, the box containing parts 134, and identify each component part?

Mr. Wolf: And I would ask the reporter to mark this as Defendants' Exhibit No. 17.

[Box containing Part No. 134 is marked EXHIBIT 17.]

Q 196. Will you indicate when that was made? A. This top was made November 12, 1956. November 13. Excuse me. November 13, 1956.

Q 197. As you take each element out will you please identify it, and I would like to have it identified by Exhibit Nos. 17-A, B, and so forth. A. The first item that is taken out of the box is the item Hidem Welt.

Mr. Wolf: I will ask that be marked Exhibit 17-A.

[Hiden Welt is marked EXHIBIT 17-A.]

[53] Q 198. Will you continue? A. The next item that came out of the box is Kraft Bag containing one-quarter pound box of tacks, six finished nails, and six finished tips.

Mr. Wolf: I ask to have that marked Exhibit 17-B.

[Paper bag containing 1/4 lb. box of tacks, 6 finished nails and 6 finished tips is marked EXHIBIT 17-B.]

Q 199. Will you continue? A. The next item that came out of the box is a fabric with the Part No. 134332 and beside that a large figure 2. Do you want me to explain this?

• • •

A. [Continuing] It shows Part 134, it is the third cut, 332, and it shows the Regal quality. There is a black fabric curtain complete with zipper in the box.

Q 200. Excuse me. Before you continue, I would like to have the reporter mark this. Will you identify this element here? You read the number off, now will you identify it further for the record? Will you indicate what it is? A. It is a convertible top for a Part 134.

[Convertible top for Part 134 is marked EXHIBIT 17-C.]

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[54] Q 202. Could you clarify that and indicate where the front trim lace is? A. It closes the spacing between the front bow and the top of the windshield.

Mr. Wolf: I will offer that as Exhibit 17-D.

Mr. Pollock: You mean you are identifying it.

[Front strip is marked EXHIBIT 17-D.]

Q 203. Will you please examine the remaining part? A. Well, the curtain is all there is and we identified that.

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Q 205. The other two remaining kits which are now here, and which I offer as Exhibit 18 and 19, are identical in the number of components except for the front strip, is that correct? A. That is correct.

• • •

[Kit No. 132 is marked EXHIBIT 18.]

[Kit No. 231 is marked EXHIBIT 19.]

Q 207. Now, I have here Kit No. 132. With respect to

that kit [55] will you please identify it for what model? A. This No. 132 fits the 1951 Ford Convertible.

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Mr. Wolf: I would like to have the reporter mark this top as Exhibit No. 18-A.

[Top from Kit No. 132 is marked EXHIBIT 18-A.]

Q 210. Would you open up Exhibit 18-A and hold it up? Now, could you unfold this Exhibit 17-C beside it and I would like to hold them up side by side. Now, could you please point out to me the differences between the structures of these two models, that is, 17-C and 18-A? A. The only differences between these two models are that the lower rear quarter section where one is fastened on the outside of the car and one is fastened on the inside of the car.

Mr. Pollock: Would you identify which is which?

The Witness: 134 is fastened inside the car and 132 is fastened outside the car.

• • •

[56] The Witness: The rear quarter of 134 is longer.

Mr. Pollock: So it can come down inside the car and be fastened?

The Witness: That is right.

Q 211. About how much longer would you say it is? A. I would say approximately six or seven inches.

Q 212. Do all the other parts or components which go to make up these particular two exhibits correspond in other respects? A. In other respects they are practically identical, except for a little difference in shape or size, but the construction is the same.

Q 213. All right. Now will you please mark on the Model 132, Exhibit 18-A, that portion of the rear quarter which is attached to the body of the car at the quarter? Just make an X.

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[57] Mr. Pollock: Why don't you mark that Y or X prime? And while we are at it, could you draw a line across there to show where one fabric—

The Witness: The body line?

Mr. Pollock: Yes.

The Witness: The body line would be right here [indicating]. It is about here and here [indicating]. In other words, this is the distance.

Mr. Wolf: Would the court reporter indicate that the witness has drawn a line across the fabric?

Q 215. As I understand it, the portion below the line extends into the car? Is that correct? A. That is correct.

* * *

[58] *Re-cross Examination by Mr. Pollock.*

* * *

XQ 217. Now, Mr. Shapiro, I have here another top, and I request that you examine it. Could you please identify what this particular top is? A. That top is an Aro Part No. 224 or 227. It is in the original container.

Mr. Wolf: Well, excuse me. It appears to be the original container.

A. [Continuing] It appears to be in the original container and the date of manufacture is on the sealing tape, 23, which signifies February of 1953.

XQ 218. Does this represent a top which your company, Aro Manufacturing Company, actually made? A. Yes.

[59] XQ 219. Now this particular top has a cushion in it? A. Yes, that is correct.

XQ 220. And, as I understand, you state that this cushion was discontinued some time early in 1954? A. Yes. Well, some time early in 1954, it was discontinued the same date or within a week of the notification.

Mr. Pollock: I request that the reporter mark this particular top for identification as Cross-Exhibit 5.

[Aro Manufacturing Company top No. 227 is marked CROSS-EXHIBIT 5.]

• • •

XQ 223. Now, this particular top has a cushion in it. Can you state whether or not the top with the cushion in it is identical with the original which was manufactured by General Motors for installation on an Oldsmobile car at around this time? A. Identical in—

[60] XQ 224. Well, how about the shape? A. Externally it looks similar to a General Motors.

XQ 225. Did they have a cushion in the same spot as your 227, Cross-Exhibit 5? A. Yes.

XQ 226. Did they have an elongated flap across the cushion for fastening to the trough inside the car? A. Yes.

XQ 227. And your top also has this type of flap? A. Yes.

• • •

[61] XQ 232. Your original replacement? A. Our original was not as heavy a cushion. Where that is two inches wider on the General Motors, ours is four inches wide on the Ford.

• • •

XQ 234. I would like to clarify this sequence. As I recall, you testified that your original replacement top, Part No. 134, had a cushion in it. Is that correct? A. That is correct.

XQ 235. When that top was installed on a car in the 1952, 1953 or 1954 Ford model, it gave you a very good seal, water seal, near the belt line? Is that correct? A. That is correct.

XQ 236. And then the cushion was dropped and a flap or shingle was substituted for it in your top No. 134? A. That is correct.

XQ 237. And that gave you a somewhat poorer water seal? Is that [62] right? A. No.

XQ 238. You say that with the cushion you got as good

a water seal? With the shingle you got as good a water seal as with the cushion? I am not concerned with the tearing problem. A. No. For our own satisfaction as far as keeping the inside of the car dry, it was as good.

XQ 239. How about shedding that water on the outside of the car? A. It did a pretty good job of shedding.

XQ 240. Would you say it was as good a job of shedding as with the cushion on it? A. I would say better.

XQ 241. You say the shingle did a better job of shedding water off the outside of the car? A. Yes.

XQ 242. Than the cushion did? A. Yes.

XQ 243. And then you dropped the flap and the cushion and you put nothing in there? A. That is correct.

XQ 244. Just relied on the fabric itself? A. That is right.

XQ 245. And that did not do as good a job at all of sealing, is that right? A. That is right.

XQ 246. But still whatever water got in ran into the trough so you were not really concerned because the inside of the car did not get wet, anyway? A. That is right.

XQ 247. So with the cushion and shingle eliminated it was an inferior seal from the point of view of shedding water? A. Yes.

• • •

[63] XQ 252. So that the fabric is touching the wiper arm during the raising and after the raising of the top. Now, [64] as I understand the situation, you are saying that even though the wiper arm does touch the fabric when the top is raised, the removal of the wiper arms would not affect materially the sealing function at the rear quarter? Is that right? Or the lack of sealing?

Mr. Wolf: Excuse me. Are you asking this with reference to whether or not it is as a function or purpose or its effect with reference to what Aro manufactures or with

reference to the original installation as apparently intended?

Mr. Pollock: Well, we are talking about a top with a wiping arm on it, and with your present top 134 on it.

Mr. Wolf: That is with Aro installation.

Mr. Pollock: Yes.

A. I would say that the wiping arm was immaterial as far as Aro is concerned.

• • •

[65] XQ 255. There was some amount, I think 1/8th of an inch? A. Yes, I would say there was 1/8th of an inch difference.

XQ 256. Which shows that the wiping arm is pushing perhaps only 1/8th of an inch? A. That is correct.

XQ 257. If you removed the wiping arm the fabric might go away from the inside of the belt line 1/8th of an inch more than if the wiping arm were there. Isn't that right? A. It might go 1/8th of an inch, yes.

• • •

[66] XQ 262. Would you say the wiper arms are as important as the fabric itself? A. I would say—

Mr. Wolf: Excuse me. I have to object to this. Are you specifically referring to the wiper arm with original top installation or with Aro top installation?

Mr. Pollock: I am speaking throughout about a car replacement top No. 134 as manufactured by Aro Manufacturing Company.

A. I would say that the wiper arm as far as the mechanism of the top going up and down and outward appearances and waterproofing in relation to an Aro top is immaterial.

[67] XQ 263. But would you say that the top fabric itself is a material part of the folding top assembly? A. I would say that the actual fabric itself, without it it is not a convertible top.

XQ 264. That is right. Now, in this particular fabric, Part No. 134, you have a part that comes down and fastens inside the car by being fastened to the trough, is that right? A. That is correct.

XQ 265. Would you say that that particular section of the fabric which extends inside of the car and fastens to the trough is fairly important in keeping water out of the car? A. Yes.

XQ 266. Would you say— A. In keeping it out of the car, but I was going to say—

XQ 267. Keeping it out of the interior of the car? A. Keeping it out of the interior of the car. The fastening to the trough is very important, yes.

XQ 268. Am I correct in stating that one of the important improvements in folding tops of the type used on the 1952, 1953 and 1954 Fords, by way of example, is the fact the fabric comes down into the car and is fastened on the inside of the car so no water can get on the interior of the car itself and any water which does seep down past the fabric goes into the trough? A. That is [68] correct.

XQ 269. Does the idea of having a section of the fabric coming down inside the car and actually fastening on part of the car, for instance, adjacent to the trough, is that the important thing? A. That is correct.

XQ 270. You have listed a number of Aro part numbers this morning which are used on cars having wiper arms on them? A. That is correct.

XQ 271. Am I correct in assuming that every one of those part numbers you mentioned includes a top section element coming down inside the car and fastening inside the car near the trough? A. Yes, they all fasten against the trough.

• • •

[70] XQ 290. What was the first automatic top you had

or which you manufactured which had a flap which was permanently attached to the inside of the car? A. 134.

XQ 291. That was for the 1952 Fords. Didn't you make— A. I mean 224.

XQ 292. For the 1950 General Motors car? A. I mean 224.

XQ 293. That was the first top fabric which you manufactured which had the flap which extended inside the car and was permanently fastened there to give you an automatic top? A. That is right.

XQ 294. Do you know of any other tops automatic in nature which had a flap extending inside the car and fastened to the interior permanently to give you automatic operation? [71] A. No.

XQ 295. Prior to 1950? A. No.

XQ 296. You don't know of any others? A. No.

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[80] XQ 336. When you started manufacturing new tops, you designed the pattern, I suppose, for the new tops? A. Yes.

XQ 337. And those new tops had a flap on them or shingle on them? A. That is correct.

XQ 338. How long a period of time was it, if you recall, between the time that you dropped the shingle completely? A. How long did we manufacture tops with the shingle?

XQ 339. That is right. For Part No. 134? A. I would take a rough guess about a year.

XQ 340. About a year. In other words, some time in early 1955 or so you decided to drop the shingle put on Part No. 134? A. That is correct.

XQ 341. As I understand it, you are still manufacturing some tops with a shingle on them? I believe we had one this morning as an exhibit? A. No. 231.

XQ 342. What car is that for? A. 1951, 1952, 1953 Oldsmobile.

XQ 343. Those tops as you presently manufacture them still have a shingle on them? A. Yes.

• • •

[81] XQ 345. I would like to clarify some points. This morning we saw a 1953 Ford with a top No. 134 on it as manufactured by Aro Manufacturing Company. Is that right? A. That is correct.

XQ 346. I am not asking you to identify what parts were made by the Ford Company or what parts were made by your company, but I will ask you to recall the overall structure, as it was sitting in the trim shop of Aro Top Sales Company and ask you whether or not that overall structure included a convertible automobile body? A. Yes, it did.

XQ 347. And that convertible automobile body, as I recall it, had a lower metal body structure? A. That is correct.

XQ 348. Did it also have a folding bow structure supported by the tonneau? A. Yes.

XQ 349. What is the tonneau? A. The tonneau is the belt line. It is the horizontal line across the belt line. In other words, it is just a flat, if you took the whole folding structure off the car you would have just a tonneau.

XQ 350. Is that just a surface or the whole body below— A. Just the surface.

[82] XQ 351. Just the surface, I see. Does this folding bow structure that was on the 1953 Ford that we saw this morning have flexible top material supported on it? A. Yes.

XQ 352. And did that top material include a rear quarter section? A. Yes, it did.

XQ 353. Didn't that rear quarter section include a part that extended down below the top of the tonneau? A. Yes.

XQ 354. And a portion of the rear quarter section was spread out, wasn't it, adjacent to the inside of the tonneau? A. Yes.

XQ 355. As I understand it also the lower edge of that extending flap was fastened to the inside of the car, wasn't it? A. To the trough, yes.

XQ 356. It was actually fastened to the trough line that is in there? A. Yes.

XQ 357. Do you recall also that this top had a wiping arm on it? A. Yes, it did.

XQ 358. The top assembly had a wiping arm on it? A. The body assembly.

XQ 359. There was a wiping arm attached to the folding bow, wasn't there? A. The folding bow on the front and the body on the rear.

XQ 360. So that the wiping arm was attached to the bow at the [83] front? A. The folding mechanism at the front.

XQ 361. And it is pivoted to the body at the rear? A. That is right.

XQ 362. It moves when the folding bow moves? A. It has a pivot.

XQ 363. Do you also recall we examined how that wiping arm moved during the raising and lowering of the top and do you recall it was touching the fabric as the top was raised? A. Yes.

XQ 364. I understand that it is your contention that when the top was in a completely raised position there is not a water-tight seal between the fabric and the inside of the belt line? Is that correct? A. That is correct.

XQ 365. Do you also recall that the arm pushes against the fabric perhaps moving it 1/8th of an inch or so? I know you don't think that is substantial, but did it move it 1/8th of an inch or so? A. In one part of it, yes.

* * *

[89] The Witness: On the record, this drawing is in the rough, but basically it is fairly correct. The shingle is above the body line.

XQ 396. Again, you said it depends on how it is in-

stalled. Will you agree that in your car, which is an Oldsmobile—and what year is that? A. 1953.

XQ 397. —all along one side the shingle does rest right on the body line? Do you recall that? A. Yes, on one side it does and on the other side it doesn't.

XQ 398. On the other side one-half or one-third rests on and the other part of it is increasingly away from the body line? A. That is correct.

XQ 399. There it apparently depends how the top of the shingle is installed on the car as to where the shingle rests [90] or its position with respect to the body line? A. That is right, but in no circumstances is it between the body and the wiper arm.

* * *

Redirect Examination by Mr. Wolf

Q 402. With respect to original top installations as embodied, for example, in the 1952 Ford, could you please indicate whether or not the wiper arm in that original installation performed an essential function? A. In an original installation by the Ford Motor Company the purpose of the wiper arm was to exert the pressure against the so-called cushion to keep water [91] out of the car.

Q 403. When you say to keep water out of the car, what do you mean? A. By pressing against the cushion and making a watertight seal between the top material and the belt line.

Q 404. Did the wiper arm in fact perform that function? You say it was intended and I am asking you now whether it did actually perform it? A. To my knowledge it did.

Mr. Pollock: A watertight seal?

The Witness: Yes.

Mr. Pollock: I am trying to compare this with your previous testimony where you said the flap did an even better job.

The Witness: When I said that our flap did a better

job, it was a better job so far as serviceability but not in watertightness.

Q 405. You have just stated that the Ford Motor Company car original construction of 1952 actually produced a watertight seal; now can you say the same thing with respect to the other models of automobiles for which you make replacements and which have wiper arms? A. Is this original car equipment?

Q 406. Yes, original car equipment. A. They did produce a watertight seal from 1950 to 1953 inclusive and the [92] first half of 1954 on the Chevrolet and Pontiac.

Q 407. Does that answer the question with respect to all the original tops used in connection with wiper arms? Did all those cars have watertight seals or were they so intended to have watertight seals? A. Yes, 1950 to 1953.

Q 408. How about the later model General Motors cars? 1954, 1955, 1956, which had wiper arms? A. The only one which used a wiper arm in 1954 was Chevrolet and Pontiac.

Q 409. How about the 1954 and 1955 Lincolns? A. The 1954 and 1955 Lincoln had the exact same arrangement as 134's.

Q 410. So your answer would or would not apply to those models? A. Yes, it would.

Q 411. In the absence of a cushion or other means for filling that space between the wiper arm and body line, does the wiper arm have any function of specific significance? A. No.

Q 412. Would you, therefore, summarize by pointing out the distinctions between functions performed by the wiper arm as incorporated in an original structure and as incorporated in a car having your replacement tops for one of those models in question? A. The functions of the wiper arm in relation to original car equipment was to keep the water out by [93] means of a pressure seal between the wiper arm and the belt line of the car. The function of the

Aro No. 134 was to let the water in and utilizing the existing drains and letting the water go its natural course. And I might interject that we have had no leakage in the interior of the car since the incorporation of this idea.

[94] Q 419. That is not the point that Mr. Pollock has brought up. He said that you have answered depositions and interrogatories previously in which you have said the fabrics that you had here were in fact corrected by removing the cushions and just recently you said that is not so, and I wanted to find out whether you could indicate at this time for the purpose of the record which is correct and how the apparent discrepancy in your testimony has come about? A. Well, starting at the beginning again on this question, I would say to my knowledge, and if you wanted to I could get my foreman in here right now under oath, and we did remove cushions from every top, to our knowledge, that had cushions on them.

[95] Mr. Wolf: Mr. Pollock, would you want to have the foreman come in?

Mr. Pollock: On this point it would just raise another discrepancy, because we have asked for people who actually did the removing, and the answers were he didn't know. Now, apparently, if the foreman comes in at this point, he suddenly does know who did some removing.

The Witness: I would not know who actually in the factory did it.

Mr. Pollock: Well, did he do it?

The Witness: He must have been in on it because anything I do in here I pull him in with me.

Mr. Wolf: The question before was: Do you know the people who did it? And I think this answer he gave was not incompatible with the question. You wanted to know the names of certain people, apparently, for the purpose of obtaining their deposition or testimony, and he indi-

cated he did not know those names. He still says he doesn't know the names, but he says his foreman would have knowledge that these things were done.

* * *

[109] *Re-Cross Examination by Mr. Pollock:*

XQ 445. Just one more question. The place we were in this morning was the trim shop for Aro Top Sales? A. We do not call it a trim shop; we call it our trim room.

XQ 446. You actually install tops in there? A. That is our laboratory.

XQ 447. You actually install tops in there? A. Yes, we do.

XQ 448. Including these tops 134? A. Yes.

* * *

DEPOSITION OF GEORGE SHAPIRO

November 5, 1957

* * *

[2] *Direct Examination by Mr. Power*

Q. Your name is George Shapiro? A. That is right.

Q. And you live at 1778 Commonwealth Avenue, Newton? A. Yes, I do.

Q. And you are an officer of Aro Manufacturing Co., Inc.? A. I am.

Q. Namely, clerk, as I recall. That is right? A. That is right.

[3] Q. And you are a partner in Aro Sales? A. Aro Top Sales Company, yes.

Q. Aro Top Sales. And Aro Manufacturing Co., Inc. manufactures convertible automobile tops; is that right? A. That is right.

Q. And it sells exclusively to the partnership; is that right? A. That is right.

Q. And then in turn the partnership sells what it buys

from the Aro Manufacturing Company to the trade, is that right? A. That is right.

Q. And you are sales manager of the partnership? A. I am.

Q. And as sales manager, I suppose, it is fair to say that you supervise the entire selling operation of the partnership? A. I do.

Q. Now, can you tell us the categories of buyers to whom the partnership sells convertible automobile tops? A. By category you mean the different types in the automotive trade?

Q. Yes, sir A. Well, what they call the auto trim jobber.

Q. What is an auto trim jobber? [4] A. He sells roll goods or top materials, seat covering material, upholstery cloths, various other things that go into automobile upholstery.

Q. And what other kinds of buyers are there? A. Then there is what we call the specialty volume buyer who would be someone who has a chain of retail stores and acts as a wholesaler for those stores. Then there is the automotive accessory chain stores and then there is the trim shop itself.

Q. And does that about cover it? A. And there is the automobile dealer and the car manufacturer.

Q. You sell to car manufacturers? A. On replacement.

Q. I take it you do not sell as such to the retail trade? A. Well, we do in our own back yard. I mean, if someone comes in and wants to buy a top, we do, or if they want it installed we do.

Q. But that is only in Newton? A. Usually just around our own back yard.

Q. Yes. Now, these customers of yours, the auto trim jobbers, first of all, they in turn, I take it, sell to retailers? A. That is right.

[5] Q. And will you describe the kind of business these

retailers do to whom the auto trim jobbers sell? A. Well, they sell to the trim shop who in turn installs it. They might sell to a small accessory store and to the car dealer.

Q. And the specialty volume buyer, how does he differ from a jobber? A. Well, he is a volume buyer or a seat cover specialist. He is usually an account that does a tremendous volume and he will buy equal amounts to a jobber and, in many cases, he has more than one or two retail outlets that do the installing.

Q. And, of course, the automotive accessory chain stores buy for themselves? A. That is right.

Q. And then you sell to trim shops which are retailers? A. Yes.

Q. And the automobile dealer buys for his own installation? A. That is right.

Q. And so to the car manufacturer; is that right? A. That is right.

Mr. Wolf: Will you clarify that?

The Witness: No, the car manufacturer actually for replacement, they do it for their own replacement [6] purposes. They install it themselves.

Q. That is what I understood, yes. Now, we are down to the level of the retail outlets, and the various retail outlets sell your product or Aro Manufacturing Company's product to automobile owners; is that right? A. Automobile owners and used car and new car dealers.

Q. And the automobile owners or dealers, used car dealers either with their own hands or with the assistance of a mechanic replace the tops on their automobiles with your product? A. Yes.

* * *

Q. I suppose it is true that the owner of a convertible buys the product of your company for a variety of reasons? Is that right? A. That is right.

Q. First of all, if there is a hole in his present top, he wants a top put on that does not have a hole? A. That is right.

Q. Or if the top is dirty, he might want a clean top? A. Well, that is more or less the exception rather than the rule. We hoped it was that way but it is not.

Q. For instance, there are white tops on the market? A. Yes.

[7] Q. Both on the original car from the factory and as replacement? That is right? A. That is right.

Q. And white tops do get dirty? A. They do.

Q. And some people replace them? A. They do.

Q. And is it fair to say that tops are replaced with the product of your company because the automobile owner gets sick of the color of his original top and wants a change of color? A. I would not think so, no.

Q. You put out a wide variety of colors? A. We do.

Q. Isn't the purpose of that to induce the automobile owner to make a change? A. No, the purpose of the wide variety of colors is because car equipment has a wide variety of colors.

Q. Well, I am told that at one time in, I think, 1954 and 1953 you put out a top known as Aro Kilty Top? A. That is right.

Q. It came in red, green and blue-gray plaids? A. That is right.

Q. Now that top wasn't to replace the same color top out [8] of Detroit, was it? A. No, it wasn't.

Q. So in fact at least that line was sold to people who wanted to have a novel change in color; isn't that right? A. No. It is not primarily color that makes them change. It is when the top is worn and then they go looking around for a top that they have their choice of various colors.

Q. And convertible tops also become faded? A. That is correct.

Q. So an automobile owner would perhaps buy one of your products because he had a faded top and wanted to replace it? A. That is correct.

Q. Now, turning to dealers, a secondhand car dealer fixes up the appearance of a car in order to sell it? You will agree with that, I trust? A. I do.

Q. And when he has in his hands a convertible automobile a dealer might well buy a new cover in order to dress it up? That is true? A. That is true.

Q. Throw away a dirty cover, or faded cover, or a torn cover; [9] is that true? A. That is right.

Q. Now, I guess I am looking merely for education at this point, but isn't it true that from year to year colors whether of automobiles or of convertible tops vary in popularity? A. Well, let me just—

[Colloquy off the record.]

A. [Continuing] It is not the increase in colors; it is the popularity of the convertible, there being more on the road and, therefore, they have added more colored tops and bodies.

Q. Well, put it this way: I got a ride this morning from a neighbor to the railroad station in a pink Chevrolet; it was not a convertible but it was a pink Chevrolet. Now, you will agree with me that never would have happened to me ten years ago? A. No, I agree with that.

Q. And it is true of convertible tops, too, isn't it? A. I don't think so.

Q. Well, you have said there is an increase in colors? A. There is an increase in colors, yes.

Q. And wouldn't you suppose that an automobile owner who had a black convertible top that was 1950 or 1951 [10] vintage, he took very good care of this car, and he sees his neighbors with more dashing colors, and he would want to get into the swing of things and have a colored top? A. Well, that might be true but some of these colored tops

in the absence of color such as white have been sold for many, many years.

Q. But increasingly so in recent years? Is that right? A. That is right.

Q. Now, as I understand it, when a national manufacturer of automobiles comes out with a new line and a new design in the convertible top field, very shortly thereafter you come out on the market with tops that are suitable for being put on the new line of convertible top cars; is that correct? A. That is correct.

Q. And about how long is the time lag between Mr. Ford coming out with a new line and your meeting it, so to speak? A. Well, we only meet it as the occasion demands, as far as time is concerned.

Q. When does that demand come? A. That we don't know. Sometimes a car can be damaged in transit, and sometimes a customer can get a brand new [11] car and have it slashed the next day.

Q. Well, you are ready to replace within a matter of a few months, aren't you? A. Yes, we are.

Q. Your Sales Company's 1955 literature contains in effect offers for sale of complete set of replacement fabrics for all 1955 convertible automobiles, doesn't it? A. I believe it does.

* * *

Cross-Examination by Mr. Wolf

XQ. Just a couple of questions, Mr. Shapiro. When Aro Top Sales deals or sells a kit for any top to any purchaser do they or do they not have knowledge as to the reason for the purchase? A. No.

XQ. Do you concern yourselves in Aro Top Sales with the reasons for particular purchases? A. No.

XQ. You mentioned previously that automobile dealers in used automobiles purchase fabric tops occasionally to fix up a car for resale; in connection with this particular

type of purchase, can you tell me whether or not you know generally the conditions of the tops? A. We don't know the purposes why they buy the tops.

[12] XQ. Let me finish. The condition of the original tops? A. No. Let me just qualify that. Not unless we install it. Then, again, most of us don't even check, anyway.

XQ. Now, can you tell me whether or not a faded top which is replaced—can you tell what its condition of wear is other than being faded? A. Well, a top can be in perfectly good condition if the dye is gone out of it. Let us say a top with a cheap dye and a good rubber combine can be just as waterproof.

XQ. When you see a faded top being replaced can you tell me whether or not there is usually wear in addition to the fading? A. That again depends on the dye in it. Most likely on a better grade top there might be or there should be wear along with fading.

XQ. In connection with the general state of the trade, are you familiar with the number of manufacturers of convertible replacement tops? A. Yes, I am.

XQ. Can you tell us something about it, about the number in general? I would like to know something with respect to the numbers of manufacturers, the type of [13] operation and the number of purchases made by manufacturers. Whatever will throw light on that general question. A. Well, there is national, and by national manufacturers I mean those who sell out of their own particular geographical area, there is about seven or eight of them. There is countless smaller manufacturers who sell in their own trading area. In other words, they have a geographical location and sell a pick-up service around that area.

XQ. Do you have any knowledge of the smaller manufacturers? Do you have personal knowledge of these smaller manufacturers? A. Yes, I have.

XQ. Can you tell me about how many you have heard

of? A. Including those that have been in business, and have gone out?

XQ. Well, you could specify, yes. A. Well, I think there is, I would say, about twelve or fifteen—

XQ. That you know of? A. Yes. —that are active today and probably the like amount that have been in business and have gone out.

XQ. You mentioned seven or eight national manufacturers? [14] A. That is right.

XQ. Do you have any idea as to how many trim shops there are in the country? Or other dealers who ultimately install these tops? A. I would say about 15,000.

XQ. In connection with the automotive car manufacturers do you have any knowledge as to their customs and procedures in replacing original tops, first, with respect to their own manufacture? A. Well, that is a long process. I assume you mean that if the car dealer decides he wants to replace a top from the car manufacturer? Is that right?

XQ. Yes. A. Well, he has to order that through the local parts depot who in turn orders it from the central parts depot in Detroit, who has to issue an order. Then there is a time limit of approximately a minimum, I would say, of three months before it finally comes back to the car dealer.

XQ. To your knowledge do the automotive car manufacturers do a substantial portion of the business in replacement tops? A. I would say No. You mean the car manufacturer himself?

[15] XQ. All right. Normally, from your own observations, do the ultimate purchasers accept this delay of three months? I assume they do not. A. No, they do not.

XQ. Assuming that they do not, what is their real alternative and just how is it normally handled in the trade?

A. Well, they go to a trim shop and buy and the trim shop installs the top.

XQ. You say the automotive dealers of new cars will go to the car manufacturers. Do they always do this? A. Go to the car manufacturers?

XQ. Yes. For replacement tops. A. Not usually, because of the delay involved.

XQ. Then according to what you say it is common practice for all of the automotive dealers of new cars to go to trim shops and companies such as yours to obtain their replacements? A. That is correct.

XQ. How long is it from the time someone comes into, say, a trim shop or retail dealer before he can get the particular top for a particular car? Manufactured by, say, your company?

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[16] A. Well, I think that would be answered in two ways. If the trim shop or car dealer have the top in stock they could install it immediately. If one of our jobbers have it in stock they could pick it up immediately. If it was a special order they could get it within a few days.

XQ. What is the maximum time delay you will normally encounter in a purchaser obtaining a top through normal channels from your company? A. A lot would depend on the geographical location of the customer but figuring someone within a one-day parcel post zone they should have it within twenty-four to thirty-six hours maximum.

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DEPOSITION OF RICHARD S. WRIGHT

July 2, 1958

[2] Mr. Wolf: First take the deposition of Mr. Wright.

RICHARD S. WRIGHT, called for examination by Defendants, being first duly sworn to tell the truth, the whole truth and nothing but the truth, testified as follows:

Examination by Mr. Wolf:

Q. Please give your name for the record. Would you please give your name? A. Richard S. Wright, 902 Roland View Avenue, Ruxton, 4.

Q. Are you an officer in Automobile Body Replacement Corporation?

Mr. Pollock: I don't believe that's the [3] correct name.

Q. Will you give the correct name? A. Automobile Body Research Corporation.

Q. Is that organized under the laws of Maryland? A. I believe it is, sir.

Q. When was this corporation organized? A. I will have to check my file. It was organized by Prentice-Hall Corporation for us. It was organized shortly before the 12th of May, 1953.

Q. Who at that time were the stockholders in the corporation? The Original stockholders? A. The original stockholders were Mr. John W. J. Ackermans, Nelson Moore and Richard S. Wright.

Q. Are they still the present stockholders in this corporation? A. They are.

Q. Has there ever been any stock transfer other than—

A. No.

[69] Q. To your present knowledge, is there any stockholder who holds stock in both Automobile Body Research Corporation and Convertible Top? A. Not to my knowledge.

Q. To your knowledge is there any director who is common to both Automobile Body Research Corporation and Convertible Top? A. Not to my knowledge.

Q. To your knowledge, is there any person, regardless of his status as an officer or otherwise, who can control decisions in both corporations? A. Not to my knowledge.

* * *

[78] Q. Does Automobile Body Research Corporation have anything to do with financing the litigation now pending in Boston? A. It does not.

Q. Does it have anything to do with—

Mr. Wolf: To your knowledge.

A. To my knowledge, it does not. No monies have been withdrawn for that purpose.

Q. Does it have anything to do whatsoever with making decisions as to who Convertible Top shall sue or how the litigation shall be conducted? A. It does not.

Q. Has anyone from Convertible top, either an officer, stockholder, director or counsel ever approached anyone in Automobile Body, to your knowledge, any officer or director? A. They have not.

Q. Let me finish the question. —to secure any evidence of Aro for use in litigation in Boston? A. They have not approached—

[79] Mr. Wolf: They have not approached you, is that correct?

A. They have not approached me or Mr. Wharton for any information in the case of Aro vs. Convertible.

Mr. Wolf: To your knowledge?

A. To my knowledge.

Q. Are you familiar with the progress of the litigation

now pending in Boston? A. Other than as I have, as a result of this subpoena.

Q. Your answer was, none other than that? A. What is it all about? That's the extent of my familiarity.

Q. Has anyone ever written you or contacted you to tell you what has happened during the pendency of the litigation other than the subpoena in question? A. Not other than the subpoena.

* * *

[89] Q. I refer back to Exhibit 5, which refers for example to the unit selling price of various items of the General Motors tops? A. For what year?

Q. For 1955, and I note they range in price from approximately $73 to $145, for Cadillac, $30 to $60 for Chevrolet, $37 odd to $67 odd for Oldsmobile. A. Oldsmobile.

Q. $41 to $72 odd for Buick? A. $99 odd half way down the page.

[90] Q. $99 odd for Buick. $32 for the Pontiac. Are these typical selling prices for each of the royalty purposes involved? A. That's correct, to the best of my knowledge.

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[12] Mr. Pollock: Thank you. Then I offer in evidence as Plaintiff's Exhibit No. 1 a certified copy of the patent here involved. This is Mackie-Duluk Patent 2,569,724.

[Certified copy of patent in suit marked Plaintiff's Exhibit No. 1.]

Mr. Pollock: I offer in evidence as Plaintiff's Exhibit No. 2 a certified copy of the file wrapper and contents of Mackie and Duluk patent 2,569,724.

[Certified copy of file wrapper and contents of patent in suit marked Plaintiff's Exhibit No. 2.]

Mr. Pollock: I offer in evidence as Plaintiff's Exhibit No. 3 a certified group of instruments taken from the records of the United States Patent Office showing the chain of title between the original inventors, in the patent here involved and the present plaintiff.

[13] [Certified group of instruments from United States Patent Office showing chain of title marked Plaintiff's Exhibit No. 3.]

Mr. Pollock: As Plaintiff's Exhibit No. 4 I offer in evidence a stipulation which has already been filed in this Court dated on behalf of attorney for the plaintiff on January 4, 1957, and on behalf of the attorney for the defendant on January 7, 1957, which relates to the title of the patent here involved.

[Stipulation relating to title of patent in suit marked Plaintiff's Exhibit No. 4.]

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[14] HAROLD SHAPIRO, Sworn

Direct Examination by Mr. Pollock

Q. Would you please state your name and address? A. Harold Shapiro, 5 Cynthia Road, Newton Center, Massachusetts.

Q. How old are you? A. 37.

Q. Are you the Harold Shapiro who is one of the defendants in the present action? A. Yes, I am.

[15] Q. What is your occupation? A. My occupation is factory manager.

Q. Has this always been your occupation? A. Yes.

Q. In one of your depositions didn't you identify yourself as a pattern maker? A. Yes, a pattern maker and factory. That all goes in the same category.

Q. What is your association with the defendant Aro Manufacturing Company? A. I'm part of the corporation. I own stock in the corporation, and that's it.

[16] Q. Are you an officer? A. I am a director.

Q. You are a director. What work do you do for Aro Manufacturing Company in your capacity as an employee or director or what-have-you? A. I make the patterns and do the hiring, firing, and make final decisions.

Q. What is your relationship to the defendant Aro Top Sales Company? A. I am an inactive partner.

Q. Would you please tell the Court who Mae Shapiro is? A. Mae Shapiro is my mother.

Q. What is your mother's relationship to Aro Manufacturing? A. She is a stockholder.

Q. Is she an officer or director? A. She is President and Treasurer.

Q. President and Treasurer. What is her relationship to the Aro Top Sales. A. She is an inactive partner.

Q. Would you tell the Court who George Shapiro is? A. George Shapiro is my brother. He is a stockholder in Aro Manufacturing Company, inactive, and he is active as Sales Manager with Aro Top Sales.

Q. He actually does the selling? A. He goes out on the road, yes.

[17] Q. Who is Marshall Shapiro? A. Marshall Shapiro is my younger brother, who now resides in Chicago, and

has not worked for Aro Manufacturing Company for a period of about three years.

Q. Is he a partner in Aro Top Sales Company? A. I believe he still is a partner, yes, inactive.

Q. Who is John Raymond Hamlin? A. John Raymond Hamlin is inactive in Aro Manufacturing Company, and is connected with sales with Aro Top Sales.

Q. Is he a partner in Aro Top Sales? A. He is a partner in Aro Top Sales.

Q. Mr. Shapiro, I would like to invite your attention to Plaintiff's Requests for Admissions, No. 1. Would you actually like to see that or I can read it to you? A. You may.

Q. Plaintiff's Requests for Admission, No. 1, reads as follows:

> "Defendant Aro Manufacturing Company, Inc., is a corporation duly organized and existing under the laws of Massachusetts and all of its manufacturing operations since the grant of the patent in suit have taken place in Massachusetts. Defendants Mae Shapiro and George Shapiro are residents of Massachusetts."

You admitted under oath that was true. Is this still true? [18]. A. Yes.

Q. All of the manufacturing operations of Aro Manufacturing Company occur within the Commonwealth of Massachusetts, is that right? A. Yes, sir.

Q. What is done with the tops after Aro Manufacturing Company actually completes its manufacture of them? A. The tops are sold or they are put in inventory, and when we receive an order to ship a top or several tops the order is sent to the Aro Top Sales and Aro Manufacturing in turn sells these tops to Aro Top Sales and they are shipped out.

Q. So in the case of every top manufactured by Aro

Manufacturing Company there is an initial sale within the Commonwealth of Massachusetts to Aro Top Sales Company? A. Yes.

[19] Q. By reason of this partnership, however, there is a sale of every Aro top within the Commonwealth of Massachusetts? A. Yes.

Q. I believe you heard my opening statement, Mr. Shapiro? A. Yes.

Q. Do you recall my mentioning the Trim Shop which your company maintains? A. Yes.

Q. I believe you and I have actually been in this Trim Shop? A. Yes, that's right.

Q. What company is it that actually maintains that Trim Shop, is it the Sales Company or the Manufacturing Company? A. The Sales Company.

Q. What do they do in that Trim Shop? A. We don't solicit business for our Trim Shop. The Trim Shop originally was set up more or less as a laboratory, the same as anybody has to have a laboratory to prove their product, to find easier and better ways of installation, making patterns. Our patterns are made by actually fitting a car that the old top has been taken off of, and we do, well, I would say 90 per cent of the trim business we do is through people that have known us over the years. We do not advertise in any public medium for this type of work.

Q. Have you ever actually installed tops in your Trim Shop? [20] A. Yes, we have.

Q. Have you actually installed Aro tops for 1950 to 1954 General Motors cars in that Trim Shop? A. Yes.

Q. For all models of those cars? A. Yes.

Q. Have you installed them since, say, January 2, 1954? A. Yes.

Q. And continually to date? A. Yes, that's right.

Q. Would the same answer apply as to Aro tops applied to 1952 to 1954 Ford and Mercury automobiles? A. Yes.

Q. And 1952 to 1955 Lincoln automobiles? A. Yes, we do.

Q. Over the years you have consistently replaced tops within the Commonwealth of Massachusetts? A. Yes, we have.

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[21] Q. After these tops are sold to Aro Top Sales Company, who do they in turn sell the tops to? A. They are sold through our jobbers or distributors throughout the country.

Q. Do you have jobbers or distributors in the Commonwealth of Massachusetts? A. Yes.

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[22] Q. You sell directly to jobbers in Massachusetts? A. We sell directly to the shops in Massachusetts.

Q. Aro Top Sales sells to shops in Massachusetts? A. Yes.

Q. On a country-wide basis what percentage of your sales would you say go to jobbers and what percentage go to trim shops? A. I would say about two-thirds to jobbers.

Q. And one-third to trim shops? A. Yes.

Q. What percentage of your sales go to the ultimate consumer, the do-it-yourself man on the street? A. It is negligible.

[23] Q. So in effect you are saying that practically none of your tops go to the actual, the ultimate consumer directly? A. Well, let me change my statement there. I was thinking of present-day tops. Going back to 1952 I would say that in Massachusetts the percentage would be much larger than other sections of the country, outside Massachusetts, where we didn't sell directly to

consumer. What our distributors did we don't know. We only sold to them. But in Massachusetts I would say, oh, about three or four percent would be sold to a do-it-yourself user, a person not trained in the arts, in other words.

Q. You say that when one of your jobbers gets one of your tops you do not know what he does with it? A. We assume he sells it to a trim shop because that is his form of trade.

Q. As a matter of practice, does either Aro Manufacturing Company or Aro Top Sales Company actually know what happens to its tops once they are shipped out? A. No.

Q. Do you care? A. Yes.

Q. So you care what model cars they go on, for example? A. I don't get what you mean.

Q. Would you like to make sure they are properly installed? A. Well, naturally we would care if they were properly installed, [24] and I think if they were not properly installed, I don't think we would get any more business from that section or that particular account because they never blame themselves, they always blame the top.

Q. Does Aro Manufacturing Company or Aro Top Sales Company ever make any effort to determine just how their tops are installed on cars in general? A. Yes. We have recently put on demonstration clinics in certain localities.

Q. Where was this? A. We did one just recently in New Haven, Connecticut. We did one in New York in 1955 at the National Trim Show. We did one in 1956 at the National Trim Show in Chicago.

. . . .

[25] Q. Now after the top goes to this purchaser, do

you then try to find out what the reason was for the purchase? A. No.

Q. Do you then try to find out how he puts it on? A. No. We just assume that the top goes to a shop that is qualified in putting it on, and we assume it goes on right. If it does not, they certainly let us know about it.

Q. Do you ever sell top fabrics for original installation? A. Do you mean a finished top?

Q. I mean for cars coming off the Ford Motor line assembly, for example? A. No.

Q. You do not sell any tops for original installation? A. The only original installation things we sold to Ford were some rear curtains in 1955, because they had so much trouble with theirs, their zippers falling in. We were doing [26] a lot of replacements for Ford. They decided to buy twelve and put them on the line. They figured if ours went on originally they wouldn't be going to another shop after they were delivered.

Q. They bought twelve, did you say? A. Yes, twelve on a 1955 Ford.

Q. Have you ever done any other work for Ford? A. Oh, yes.

Q. I mean with relation to the top fabric as original equipment? A. Yes.

Q. What work have you done? A. We have installed Aro tops on 1954, 1955, 1956, 1957, 1958, Ford, Mercury and Lincoln.

Q. As original equipment? A. No, as a factory replacement.

Q. No. I am speaking of original equipment. A. Original? No.

Q. You have never done any original work for them. A. No.

* * *

Q. Have you ever done any original installation work

for the General Motors Corporation? A. No.

Q. Have your tops ever been used as original installation equipment? [27] A. No. One thing I might interject, Mr. Pollock, is that awhile back when I considered purchasing a new car I even inquired to see if I could buy a car without a top. They wouldn't even sell me a car without a top.

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The Court: I am not talking about a car that you never [28] saw before. I am talking about my hypothetical 1954 Buick. Is your top better than the top that came with that Buick? I am assuming the top that came with the Buick new. It is four years old today. But is your replacement top an improvement over the top that it originally had?

The Witness: I would say, your Honor, it would be equally as good. I don't think it would be better and I don't think it would be worse. But that would depend upon the quality of the fabric. Assuming you bought a new top, the quality of the fabric that was used, the stitching, the cut.

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[29] Q. I would like to clarify this point. Are you saying that with or without the cushion you got substantially the same amount of water in? A. I would say that—well, yes, I would say that.

Q. Do I understand that for all practical purposes you say the cushion is not really effective in keeping water out? A. I say that, yes.

Q. You say the cushion is not important? A. That's right.

• • •

Q. I hand you a paper and I ask you to look at it. It is your answer to Defendant's Interrogatory No. 10. Is this your signature? A. Yes, it is.

[30] Q. Would you please read your answer into the record?

A. "Defendants are informed that there is a reasonably possibility that the following automobiles having tops of original manufacture might be considered to read upon one or more claims of Patent No. 2,569,724: 1952-1954 Ford Mercury, 1952-1955 Lincoln, 1950-1954 Cadillac, Oldsmobile, Buick, Pontiac and Chevrolet."

[31] The Court: It makes no difference whether it has a cushion or not?

The Witness: Your Honor, the 1953 Pontiac and the 1954 Pontiac, the framework of the car itself is identical. We use the same top for the 1953 and the 1954 Pontiac and Chevrolet, which are identical. The 1953 had these wiper arms that are in discussion here, and the 1954, a wiper arm was not used but a stationary bar was secured inside the car in lieu of the wiper arm.

Q. On all models of the 1954 Pontiac? A. All 1954 Pontiacs and Chevrolets, all that I have seen.

Q. We have seen different cars then, I am afraid. A. Well, you see, a 1953 and a 1954, unless you actually had the body number of the car you almost couldn't tell them apart. The convertible top is interchangeable in every respect to size, shape, fit and function.

Q. On the 1953 and the 1954? A. That's right.

Q. It is interchangeable in the same regard with the original fabric? Is your replacement interchangeable in the same regard? [32] A. Yes.

Mr. Pollock: Would you like to ask another question or two, your Honor?

The Court: I seem to be getting into a question that does not raise the point I wanted to ask. I have a 1953 Pontiac now.

The Witness: All right. The original 1953 Pontiac was constructed with a cushion and a wiper arm, with the wiper arm pressing against the cushion causing a watertight seal.

Q. Could some water get past the watertight seal? A. It is not very possible.

Q. What is the trough in there for? A. I don't know.

Q. Go ahead. A. It basically was a securing place for the flap that goes down inside and holds it down snug. The flap is secured to that trough.

Q. You are saying that until your invention or until your change came along the trough was completely useless? A. I don't say it was completely useless. It is possible that the wiper arm might have fallen off in instances, or anything could have happened. It could have got bent and let the water in, and the water would go in the trough. It was sort of an auxiliary precaution.

Q. Do the wiper arms bend easily? [33] A. No, but they get lost. They are only held on by one screw, and the top is pivoted on that particular screw, and it is possible they do unwind.

Q. You are telling us that General Motors Corporation put a part into their car which under most circumstances performed absolutely no function? A. I didn't say "no function." I said it was an auxiliary precaution.

Q. All right. Continuing with the Judge's inquiry, we have this 1953 Pontiac with the cushion in it? A. Yes.

Q. The top becomes dirty and it is taken off and is replaced with one of your Aro tops without a cushion A. Let's say the top was slashed or torn, or something like that, for whatever reason. They don't replace them for being dirty.

Q. Well, for reasons of curiosity.

The Court: How do you know they do not replace

them for being dirty? Somebody might like to have a brand new shiny top every year.

The Witness: Well, your Honor, generally they are replaced because they leak or the stitching is gone or there is some emergency. I am basing that on what comes into my own trim department. When they come in they sure need it.

Q. We have put on one of your replacement tops without a cushion. A. Yes.

[34] Q. Does the water get into the car? A. Some does. Some is shed off with the shingle.

Q. From a net result point of view, looking at the final net result, does your top without the cushion operate better, worse, or equally as well with the original? A. I would say better.

Q. You would say better? A. Yes. First of all, we have gained the ultimate result. We have put on a top that looks well, fits well, and to the ultimate consumer it is waterproof. In other words, all water is taken care of by drainage or shedding or something like that, in other words, no water is getting inside of the car, the upholstery or the floor mats.

Q. From a net result point of view it is still waterproof without the cushion? A. That's right.

Q. This is your top? A. Yes. Now we go to why I think it is better.

Q. All right. A. The pressure of the wiper arm against this cushion causes a very, very tight seal. Consequently, when a top goes up and down there is considerable wear and chafing and tearing that is encountered between this watertight seal, between the wiper arm and the body.

The Court: When the top goes up and down doesn't the wiper arm move?

[35] The Witness: Yes, your Honor.

The Court: Does it maintain this pressure?

The Witness: Once it leaves the body it relieves the pressure, but coming back up again, in order to put pressure against the material again, it does have a wiping action and pressing again. It does slide off the fabric, and consequently both sides of the fabric slide off the fabric.

[36] Q. Is this even with your replacement top? A. No. The replacement top is designed with the shingle above the body line so that there is a space between the wiper arm and the tonneau or the body of the car.

Q. Continue with why you say this top is better, your top. A. In that respect. There is no chafing action.

Q. You are still able to keep water out of the car? A. I would say 75 per cent of the water would run off the car if the car were standing still and the balance would be taken care of by the drainage system.

Q. Again we are talking about without a cushion? A. Yes.

Q. Let's look at this from the point of improper access. You say you have a little gap between the fabric and the belt of the car? A. That is General Motors?

Q. 1953 Pontiac. A. Yes.

Q. Can people reach into that gap? A. No.

Q. How big would you say it was? A. I would say ⅜ to ½ an inch.

Q. Could you reach a hand in? A. No.

Q. A finger? [37] A. No. Yes, you could put your little finger in, but not enough to take anything out of the car. The common practice, if I may interject, is, people don't bother, if they want to steal something, they don't bother unsnapping. They just take a knife and slice it out.

The Court: That happened to my car and I had nothing but snaps.

The Witness: That's right. They could have easily opened it up.

The Court: Very easily.

* * *

Q. Now, as I understand it, your company manufactures a number of differen parts; is that correct? A. Yes.

* * *

[38] Q. Looking at the second page of this exhibit you will note that there is a listing or cataloging of all your different part numbers? A. Yes.

* * *

Q. Of these 140 part numbers, they are all replacement top fabric, are they? A. Yes.

Q. Are these different part numbers different in shape and size? A. At the time of this printing, we considered them all different.

Q. Were they designed for different cars? A. Yes.

Q. Of these 145 numbers, what is your part number for the 1952 to 1954 Ford automobile? A. 134.

* * *

[39] Q. Will that one part number fit any other automobile listed on this exhibit? A. It is possible.

Q. You don't know of any? A. No.

Q. What is your part number for the 1950 to 1954 General Motors lines, whichever ones you think apply here? A. 224, 226, 230, 231, 232, 233, and 234.

Q. Are all of those part numbers still used, or are some of them duplicates? A. Some of them have been incorporated. 230 and 231 are the same. They are 231 now. 234 has been incorporated with 226, so they are all 226's now.

Q. So, in effect, you have five different part numbers for the General Motors cars? A. That's right.

Q. You have one part number, 134, for your Ford automobiles? A. And 509 for the Lincoln.

Q. That is for the 1952-1955 Lincoln? A. Yes.

Q. So we have these seven parts with which we are concerned, of the 140 that are listed? A. Yes.

[40] Q. Of these various part numbers which you have identified, and I don't have a listing, I now invite your attention again to Exhibit No. 7 and I note that this exhibits says, Aro tops have an accurate pattern for every convertible model from 1928 on, insuring custom tailoring, precision of fit. Is that a true statement? A. Yes.

Q. You say you have an accurate pattern for these tops? A. Yes.

Q. Who made the pattern? A. I did.

Q. When you made the pattern were these tops specifically designed for installation on the cars of which you speak? A. Yes.

Q. And as I understand it, they will not, to your knowledge, fit on other cars? A. That's right.

* * *

Q. I invite your attention also to the fact that in speaking of the design, Plaintiff's Exhibit No. 7 states that the Aro tops are custom tailored for each car and model. Is that a true [41] statement? A. Yes.

Q. These are custom tailored for each car and model? A. Yes.

Q. Under the heading, Construction, the brochure says it is identical in design with original top. Now, disregarding seams and the like, just concerning yourself with shape, is that a true statement? A. I would like to elaborate a little bit, Mr. Pollock, if I may.

Q. Go ahead. A. We say identical to original design, we mean when a Ford is going down the road, it doesn't look like a Chevrolet and primarily, it is where the seaming is. In other words, just where we put our stitching. It doesn't mean if Chevrolet has their rear seams veed

in and Ford has theirs straight down, we would vee them in and make them look like a Chevrolet.

Q. Directing your attention to the rear quarter of the automobile, are your replacement tops shaped the same way? A. No.

Q. What is the difference? A. The difference is in the section going down inside. Our tops go down inside, but we have this shingle above the body and they had a weather tight cushion.

Q. Concerning ourselves with just the flap inside the car, is [42] that the same shape as the original top? A. Fairly close, yes.

Q. It is still of the proper length to come down and attach to the trough? A. Yes.

Q. And so that it passes the wiper arm for cooperation therewith? A. Well, yes. If it goes down to the trough it has to pass the wiper arm.

Q. So that original differences you say exist between the original and replacement tops are concerned with the cushion or shingle or the like? A. Yes.

Q. But from a general outline shape we have this same sort of construction; is that correct? A. Yes.

Q. I would like to show you a top, Mr. Shapiro. [Brief pause.] I believe you have seen this before, but I would like you to look at it and identify it, if you can. You can open the box. A. First I would like to call the Court's attention that this top was made in February of 1953.

Q. Who made it? A. Aro Manufacturing Company.

* * *

[43] Q. Now, do you know what car this top was designed for use on? A. It was designed for the 1950-1951-1952 Chevrolet, Pontiac and Olds 88.

Q. We have been talking about a flap adapted to extend inside the car. Do you have such a flap on this top? A. Yes, this is the flap here.

Q. Would you indentify it, say, by—. Put a numeral 10 on that flap and sign your name. A. [Complying.]

Q. That is the flap which we have been speaking about which is adapted to extend down below the belt line? A. Why don't we draw the body line in there and then I think the Judge can get a better idea.

• • •

A. [Continued] This is the body line right here.

The Court: I notice where you have marked the body line appears to be some thickness. Is that a cushion?

The Witness: That is the cushion.

Q. As I understand it, this top with the cushion in it, this is the way General Motors originally made it? A. Basically the same, yes.

Q. When you got notice of infringement, did you remove this [44] cushion? A. We removed the cushion and completely changed our design.

Q. Did you change the shape of the fabric down here at all? We are talking about the flap which we have identified at 10. A. Well, the shape is different, prior to assembly. In other words, we now bring this up and around and bring the flap down this way.

• • •

A. The overall shape of this flap down below was principally the same.

Q. So that once you got notice of infringement you removed the cushion and put a shingle on it, but you left the shape and the existence of the flap just as it was before. A. Yes.

Q. Would you say that except for the cushion this top typifies the part numbered 224 as you sold it after January 2, 1954, except for the cushion, as I said? A. Yes.

Mr. Pollock: Your Honor, I would like to offer this in evidence as Plaintiff's Exhibit No. 10.

[Aro top typifying part No. 224 as sold after January 2, 1954, marked Plaintiff's Exhibit No. 10.]

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[47] Q. I show you a box and ask whether you can identify it? A. Yes. This is Aro Part 134, all black top, and fits the 1952 to 1954 Ford and Mercury.

Q. It says right on the box that the top 134 fits the 1952, 1953, and 1954 Ford and Mercury? A. Yes.

• • •

Q. Will it fit any other cars that you know of? A. No.

Q. Is the reason it fits both the Ford and Mercury because the body shell is the same on the two cars? [48] A. Yes.

• • •

Q. Does this part No. 134 have a cushion in it? A. No.

Q. This is the way you were making your 134 after you got notice of infringement? A. Yes.

Q. You dropped the cushion? A. Yes.

Q. Does this have the long flap of which we have been speaking adjacent the rear quarter of the car? A. Yes.

Q. Is this flap designed to go down inside the car again? A. This flap was tested by us and it can be secured or it doesn't have to be secured. It is immaterial. It works equally as well both ways.

The Court: The question was not whether it was secured but whether it was designed to go down inside the car.

The Witness. Yes, it was.

The Court: If it is not secured what happens to the trough?

[49] The Witness: Well, the trough is located just above the fender well of the car. Any water coming into the fender well will run right through and out a bottom drain, in fact one and the same drains used on the side windows of the automobile.

Q. It will run right down what? A. The fender well.

Q. Will it run down the fabric, too? A. Yes.

Q. If the fabric is not secured where would this water go? A. Down the fender well. If it was secured it would go in the trough.

Q. In a proper installation, where we are trying to use the trough for its intended purpose, you should secure this flap to the trough, is that correct? A. Yes.

Q. That is what the flap is there for? A. Yes.

The Court: But if it is not secured, and there was another place the water would go, it would go out from that, too?

The Witness: Yes, your Honor.

The Court: Is it peculiar to that particular model car or is that so generally?

The Witness: It is so generally, your Honor. It would take the same drain, the side windows and doors and rear quarter [50] windows would take when the water runs down there. There is a drain underneath the rocker arm, and there is another drain at the rear of the fender that the water would run out.

Q. If the flap is not attached to the trough is there any purpose in providing the flap at all? A. Yes.

Q. What is that purpose? A. To keep enough material down below the body line, keep it from blowing out or being pulled out. In other words, if we cut it short at the body line part of it is liable to go outside the car.

Q. Would that make any difference to you? A. Yes. It would probably be unsightly or cause tearing in the wind.

Q. By the same token, if this fabric is loose isn't it likely to flop out? A. It isn't loose because—may I see this, please?

Q. Yes. A. The fact is this top is secured here and here [indicating].

Q. You mean at the ends of the flap? A. Yes. The longitudinal strain prevents it from falling in.

Q. In a proper installation, as you intended it, in a proper installation this flap should be secured to the trough, isn't that correct? A. Yes.

• • •

[51] Q. Mr. Shapiro, do you recall that we took your deposition at one time, and at that time you had some cars available on which you had mounted replacement top fabrics of your company's manufacture? A. Yes.

• • •

Q. I will hand you this copy, Mr. Shapiro, and I will ask you to identify what the car is and what the top fabric is on it? A. That is part No. 231, a 1953 Oldsmobile.

Q. Does this picture show the replacement top fabric as having a long flap of the type we have been describing? [52] A. Yes, it does.

• • •

Q. That is the long flap? A. Yes.

Q. In this installation, does the installation include a drain trough? A. Yes, it does.

• • •

Q. Is this long flap attached to the drain trough, the flap 15? A. Yes.

Q. Are the attaching means shown in this drawing or in this photograph, I should say? A. Yes, they are screws.

• • •

Q. Does this include a wiping arm? A. Yes.

• • •

[53] Q. If you will take a lead line from there it perhaps would show up better. This long flap, properly installed, is attached at the trough, to the trough on its bottom, is that correct? A. Yes.

Q. And it passes down between the belt line of the car and this wiping arm, is that correct? A. Yes.

Q. This is one of you replacement tops? A. Yes, it is.

Q. Is this the way you presently make your replacement tops for this car? A. Yes.

Q. Is this the way you make it over the years, since 1954, let us say? A. Yes.

Q. And the same installation applied for this model car over this period of years? A. Yes.

Q. I show you another photograph which was taken at this time, and which has the numeral 15 on it, and I ask you whether or not you can identify what the car is and what the top fabric is on it? A. This is part No. 134.

Q. Is this your part No. 134? A. Yes.

[54] Q. On what kind of car? A. On the 1952 to 1954 Ford. This is the 1953 Ford.

Q. Does this fabric again have this long flap adjacent the rear quarter? A. Yes, it does.

• • •

Q. Is there a trough in this area, a drain trough? A. Yes, there is.

• • •

Q. Is this long flap which we have been discussing attached to that drain trough? A. Yes.

Q. Adjacent the bottom of the flap again? A. Yes.

Q. Is there a wiping arm in this construction? A. Yes.

• • • •

[55] Q. Again this long flap on your replacement top 134 passes between the wiping arm and the belt line? A. Yes.

Q. Down to the trough where it is fastened? A. Yes.

• • •

[56] I hand you another photograph and I ask you whether you can identify this photograph? A. Yes. This is the same car, No. 134, 1953 Ford with an arrow top.

• • •

Q. I am going to outline in ink certain assemblies on the outside of the car and I ask you to tell me what they are. A. Those are fasteners located on the outside of the car.

Q. Studs?

[57] A. They call them boot studs for putting the boot on.

Q. These are snap fastener parts that are already on the car? A. Yes.

Q. Are they on all convertible cars of the 1952-1954 Ford line? A. Yes.

Q. And the Mercury line? A. Yes.

Q. Lincolns as well? A. Yes.

Q. How about the 1950-1954 General Motors cars? A. Yes.

Q. These are fasteners already on the car? A. Yes.

Q. Would it be possible for you, as a pattern maker, to design a top for replacement on this car adapted to snap on these fasteners already on the car? A. Yes.

Q. In other words, you could have designed replacement parts which would have snapped on the existing studs? A. Yes.

Q. You did not do that? A. That's what I started to say before. This particular top on this car now, without any alterations, can be put on those [58] fasteners.

Q. But you would have to put snap fasteners on them? A. Yes. The same thing would apply to all factory equipment. The fasteners are put on the last thing.

Q. You could have made a replacement top which could snap onto the car? A. Yes.

Q. Was there any reason for not making such snap fasteners on tops? A. No. There is no reason for not making it, but the way it is constructed now, it has been used in both manners of installation. In other words,

if a man didn't want to crawl inside and get all dirty screwing the thing on, instead of putting the flap inside he could bring it on the outside, bend the flap up and put two fasteners on it and he is in business.

Q. But that isn't the way your top is originally designed? A. No.

Mr. Pollock: I offer in evidence as Plaintiff's Exhibit No. 14 a photograph of a Ford automobile showing the boot studs on the outside thereof.

[Photograph of Ford automobile marked Plaintiff's Exhibit No. 14.]

[59] Q. But you do have to make a new pattern when a new model car comes out? A. Yes, if it differs from the previous year.

Q. When the 1950 General Motors cars first came out with this construction on it, did you have to make a new pattern for that model car? A. Going back to 1950, we have a part No. 223 which fits the 1949 Chevrolet, Pontiac and Oldsmobile. When the car first came out it looked so identical to the 1950 that came out, except for the flap that goes down inside; that we used the same pattern for our 1950 by taking the 1949 and just adding that bottom quarter section.

Q. You added the extra section at the rear quarter? A. Yes.

Q. Why did you add that? A. Because the original was put on that way.

Q. You wanted to put it on the same way the original top was on, on the 1950? A. That's right.

Q. What happened when the 1952 Fords first came out with this construction? A. We made a top—we made a completely different as far as [60] looks are concerned, with the 1952 Ford, because they had a very, very tremendous wrap-around curtain that was probably twice the

size of what is on the cars now and that particular car caused an awful lot of zipper trouble and so forth in the industry, and the cost of replacing the curtain was very costly, so I designed a Ford top which is very similar to the one we are using today and we noted a space between the wiper arm and the body—

Q. This is in 1952? A. Yes. And we installed a pad to fill up the space. Then we encountered quite a bit of trouble on the tops going up and down, pinching in that area, because of the nonuniformity of the space between the wiper arm and the body. Some were very loose, you couldn't put enough padding in them, and some were tight.

Q. Could you adjust the wiper arm? A. Not to my knowledge. We never attempted it and we never saw any adjustment for it. When this letter came in from Mr. Hall, the thing which seemed to be in question, in a conference between my patent attorney and myself, was the fact that we were using a cushion, so we switched to a shingle.

Q. On this switch, was this considered—when you switched from the cushion to the shingle, did you consider this was going to make the top work poorer? A. No, sir.

• • •

[61] Q. It was going to work the same way even with the shingle on it? A. Well, yes. Instead of relying on a nonuniform pressure of the bar against the padding on the cushion, we were going to install a shingle above the body line and let the water go in and then use the trough to take the water out.

Q. And the net results would be precisely the same? A. We thought so. By raising and lowering the top several times we found in some instances the shingle was wearing out because of the nonuniformity of the car and we tried

one without, and we took a bucket of water and sponges and so forth and put as much—simulating rain, and we found the trough took care of the water and we didn't need the shingle.

Q. So the fabric itself took care of the water, the fabric and the trough? A. We let the water in the car and let the trough take care of it. The fabric more or less acted as a guide for the water, that's all.

Q. But the fabric did act as a guide for the water? A. If there was no fabric there, it certainly wouldn't run down the drain.

Q. It was guided by the fabric into the trough? A. Yes.

Q. I am concerned with how you went about making a pattern for the 1952 Ford. This was a different car from the 1951? A. Yes. First of all we take the old top off, take everything [62] off but the pads; that is the two long pads, and we fitted it just like a custom suit is fitted. We put the material in position and stretch it around, mark it with chalk and transpose it onto paper.

Q. At the rear point did you also fit it, at that point? A. Yes, we just pull a straight piece of material down through.

Q. Down through where? A. Between the body and the wiper arm.

Q. Down to the trough? A. Yes.

Q. Then you got it to the proper length at that point to attach it to the trough? A. Yes.

Q. Now, when you made these various changes you are talking about in 134 for the Ford, when you dropped the cushion and put the shingle in and then dropped the shingle, did you actually redesign as to the shape of the flap that you were working with? A. Yes, we did change the shape of the flap somewhat. The Ford flap originally, on the rear end of it, it came out in some sort of an elongated hook fashion and we came down straight.

[63] Do you recall, Mr. Shapiro, during the deposition which I have discussed previously, I asked you a series of questions relating to the actual construction we had seen on your 1953 Ford with the part No. 134 on it? I would like to ask you those same questions now to see whether or not you still agree with the answers you gave at that time. As you will recall, Mr. Shapiro, during this test we saw a 1953 Ford with a top No. 134 on it as manufactured by your company; is that correct? A. That is correct.

Q. I am not asking you to identify what parts were made by the Ford Company or what parts were made by your company, but I will ask you to recall that overall structure as it was sitting in the trim shop of Aro Top Sales Company, and ask you whether or not [64] that overall structure included a convertible automobile body? A. Yes.

Q. And that convertible automobile body, as I recall it, had a lower metal body structure; is that correct? A. What do you mean by a lower metal body structure?

Q. A lower metal body structure. A. The tonneau?

Q. Yes. There was a panel inside of that car adjacent the rear quarter, wasn't there, for supporting a trough? A. Yes.

Q. And there was a trough or a rain gutter on that panel; is that correct? A. Yes.

Q. Now, did this car that we saw also have a folding bow structure supported by the tonneau? A. Yes.

Q. And did this folding bow structure that we saw have flexible top material supported on it? A. Yes.

Q. Now, did that top material include a rear quarter section? A. Yes.

Q. And did that rear quarter section include a part that

extended down inside of the car below the top of the tonneau? A. Yes.

[65] Now, the lower edge of that extending flap was fastened on the inside of the car, wasn't it? A. Yes.

Q. It was fastened to the trough, wasn't it? A. Yes.

Q. And a portion of the rear quarter section was spread out, wasn't it, adjacent to the inside of the tonneau? A. Spread out?

Q. The material was spread out? A. Taut?

Q. It was spread out along the belt line? A. Yes.

Q. Now, there was a wiping arm attached to the folding pillar, wasn't there? A. Yes.

Q. And it was pivoted to the folding bow, wasn't it? A. The folding pillar was, yes.

Q. And it moved when that folding pillar moved, didn't it? A. Yes.

Q. The wiping arm moved as well, do you recall that we actually went inside of that car and saw exactly how the wiping arm moved during the raising and lowering of the top? A. Yes.

Q. And do you recall that we saw that this top, as it was being raised, the wiping arm was actually touching the fabric? [66] A. I don't remember that so precisely.

Q. Let me show you your deposition on that point. I show you page 83 of your deposition dated February 20, 1957, and I will read Question No. 363 to you.

"Q. Do you also recall we examined how that wiping arm moved during the raising and lowering of the top and do you recall it was touching the fabric as the top was raised? A. Yes."

Does that refresh your recollection as to what you saw at that time? A. Yes.

Q. Do you agree when the wiping arm was moving in this top, it was actually touching the fabric? A. Yes.

• • •

[67] A. The fact that it touched it, I imagine it pushed it in somewhat but not an appreciable amount.

Q. You are saying it pushed it somewhat toward the belt line of the car? A. That's right.

[68] Q. This top we have been discussing did not have a cushion on it, did it? A. No.

Q. Would this same discussion that we have just had as to the various parts and their operation apply as well to a General Motors car of the 1950 to 1953 vintage, say, with an appropriate top as manufactured by your company on such a car? That is, would it have these various parts we have been talking about? A. Yes.

Q. Would these parts operate in the same way? A. Yes.

Q. Again the top would not have a cushion? A. That's right.

Q. Would you consider the cushion to be of importance in these replacement top structures or in the original top structures? A. No.

Q. You would think the top works as well with or without the cushion? A. Well, I will change my phraseology. I would say that the top, the way it is made by General Motors, with the cushion was important if you desire to keep the water out. The way we make our tops, Aro makes its tops, is not to keep as much water out as possible but to direct it out after it is in; very similar to the way cars are made for 1955 and—

• • •

[69] Q. So in effect isn't it true that what you did by dropping the cushion was merely to let some more water in than might otherwise get in? A. Well, the shingle we put on the top—I think the way we make ours was not so much worrying about where the water goes, because we made quite a few tops and never had any complaints on leakage. I think the primary purpose for the way we do it is to prolong the life of the top.

Q. I believe you have testified that 90 per cent of the purpose of the top is to make it leakproof? A. Yes.

Q. Do you still agree with that statement? A. Yes.

Q. Concerning this question of keeping water out of the car, isn't it true that by dropping the cushion you merely let in some more water than would otherwise get in? A. Yes.

Q. But the trough was already in the car? [70] A. That's right.

Q. It was there to handle water that got into the car, wasn't it? A. Yes.

[71] Q. Let us consider the Ford for the moment. In the Ford car can the trough handle any water that gets in even when you haven't got a flap and when you haven't got a cushion? A. Yes.

Q. And you merely let in some more water than might otherwise get in if you had a cushion, is that correct? A. That's right.

Q. In your first deposition, Mr. Shapiro, you testified as follows—well, I should say that I asked you the following:

"The witness has testified, as I understand it, that even if they would put a top, that top 134 on to a Ford car without a cushion or a flap it will still keep the water out of the car."

And the answer to that, that you gave:

"It is still watertight. The material is still one piece going down to the trough."

I asked:

"Is it still watertight?

You said:

"Oh, yes."

[72] Q. Is it important that the material goes down to the trough? A. If it is to resemble an original structure, yes.

Q. Is it important from the point of view of keeping water out of the car? A. That it goes down in the trough?

Q. Attached to the trough? A. Yes and No.

Q. At one time you testified Yes. A. Since that deposition was taken we have conducted tests.

Q. At one time at least you thought it was important that the flap go down to the trough? A. Yes.

Q. As you make your tops at the present time, you still make them with the flap long enough to go down and attach to the trough, is that correct? [73] A. Yes, that is correct.

Q. As I understand your testimony previously, you also said that the cushion wasn't too important? A. That's right.

Q. That any water that got into or between the belt line and fabric could still go out the trough, is that correct? A. Yes.

[75] Q. I invite your attention to certain Requests for Admission and Interrogatories that you have already answered. I would merely like to read them so that we can get your answers to [76] them again. Request for Admission No. 17 reads as follows:

"The original patent for Aro replacement top part No. 134 was prepared by defendant Harold R. Shapiro, and the said part No. 134 was specifically designed by said Mr. Shapiro for installation on 1952, 1953, and 1954 Ford and Mercury convertible automobiles."

You answered that under oath: "Yes." Is that still the correct answer? A. Yes.

Q. Request for Admission No. 20 reads as follows:

"The original top equipment on the 1952 Ford convertible automobile, as manufactured and sold by the Ford Motor Company, includes a folding convertible top comprising flexible top material having a cushion therein running parallel to and in line with the belt line of the car when the top is in a raised position. This cushion is pressed against the body of the car by means of a wiper arm when the folding convertible top is in raised position. The thickness of said cushion, as originally made by the Ford Motor Company is ⅜ inch."

Is that correct, and is it still correct?

A. This is 1952?

[77] Q. 1951 original equipment. A. Yes.

Q. On that line, since the cushion thickness was only ⅜ths of an inch, wouldn't you expect that the wiper arm was designed to come within at least ⅜ths of an inch of the side wall of the car on a 1952 Ford automobile? A. No. It could come within ½ inch.

Q. Then it wouldn't even touch the cushion, would it? A. I will say ⅜ths of an inch is about the average of what I have seen.

Q. So, in other words, the wiper arm was designed to come within at least ⅜ths of an inch on the inside of the car? A. Yes.

Q. I invite your attention to Request for Admission No. 21;

"The following statements, made by Defendant Harold R. Shapiro, in reference to the folding top structures of Ford convertible automobiles, are true;

'Q. You don't think the cushion is important in the Ford car? A. No.

Q. It works as well without the cushion? A. Better.

Q. It looks as good and keeps water out without the cushion? [78] A. I would say the cushion serves no purpose.

Q. You really don't know, according to your tests, whether the top with a shingle or with a cushion did a better job or not? A. I don't know how it could do a better job if it did a perfect job without the shingle and the cushion. How good is better?' "

Was this your testimony? A. Yes.

Q. I invite your attention to Request for Admission No. 22:

"Defendant Harold R. Shapiro has personally installed an Aro part No. 134 on a 1952-1953 and or 1954 Ford and or Mercury convertible [79] automobile, within the Commonwealth of Massachusetts."

And your answer was, "Yes." Is that still correct? A. Yes.

Q. Concerning this Part 509 that we have mentioned for the Lincoln car, I invite your attention to Request for Admission No. 23, which reads as follows:

"Aro part No. 509 is a convertible top, manufactured by Aro Manufacturing Company, and specifically designed by Defendant Harold Shapiro for installation on 1952, 1953, 1954, and 1955 Lincoln Convertible Club Coupes. The following statement, made by Harold Shapiro, relating to the installation of Aro part No. 509 on one of said Lincoln Convertible automobiles, is true:

'Q. Then the material in that Lincoln car, using the 509, would again be attached to the trough and passed down between the wiping arm and inside of the belt line, and attached to the folding pillar and around the rear of the car? A. Yes.' "

Do you agree with that answer and with the rest of the material in Request for Admission No. 23?

[80] A. Yes. Would you read the answer, please?

Q. The answer as you gave it was:

"Yes, the fabric top 509 made by Aro includes a shingle. However, if more than a normal amount of these tops had been manufactured, the shingle would have been eliminated."

A. It has been eliminated.

Q. It has now been eliminated? A. It has.

Q. And other than the material which I described, other than that, it still functions in regard to the wiping arm in the manner we have been discussing? A. Yes.

Q. Request for Admission No. 24:

"The following statement made by Defendant Harold R. Shapiro, is true:

Q. Is that part No. 509 similar to part 134 except for size? A. It is similar in installation. In fact I would say the installation is almost identical."

Your answer to that Request for Admission was "Yes."

A. Yes.

Q. Do you still agree with it? [81] A. Yes.

* * *

[83] The Court: On the Ford car the guide bar would not be touching the fabric?

The Witness: It might be touching it, but not enough to close any gap between the body line and the fabric.

Q. Does it close it at all? A. No.

The Court: It doesn't show it closed in that diagram.

Q. My point is, Does it push it at all toward the inner belt line? A. I don't think it does. It might touch it but the prolongation, according to this, if you took the guide bar away the top would fall in, which is not the case. If you took it away, even though there was a

slight pressure it wouldn't affect the looks or the [84] appearance of the top.

Q. Did this flap that you show perform any function? A. The flap, yes. It is a sort of a—we call it a shingle, it could be an eave. When the water runs down the top it uses it as a springboard and runs over the body of the car instead of into the car.

Q. Does it perform the same end function a cushion would perform? A. Only on a very straight rain. Any driving or windy rain, a considerable amount of water would pass under the shingle and down the material into the gutter.

Q. Wouldn't that same thing occur with the cushion? A. No. Nothing could get in. I haven't seen any that had cushions that it could get in.

Q. What is the purpose of the trough in the car? A. As an auxiliary means of water dispersal, if the wiper arm was disengaged or fell off or got damaged, which is very common in the industry.

Q. I show you this letter which has been identified as Plaintiff's Exhibit 9-C. I invite your attention to page 2 of the letter and I ask you to read this paragraph aloud. A. [Reading]:

> "With reference to your client's Patent #2,569,742, you will notice that in each of the claims of that patent, there is recited a wiping arm which is adapted to wipe the inside of the [85] lower portion of the top material and force it towards the inner wall of the body forming a water-tight seal. My client's construction, however, does not require or utilize such a construction, but rather operates in an entirely different fashion in which the inside of the car is waterproofed by the above-mentioned flap in much the same way as a shingle on a roof provides a water-tight seal."

Q. Do you agree with the last statement, that the car is waterproofed by the above-mentioned flap in much the same way as a shingle on a roof provides a water-tight seal? A. I would say it is as water-tight as a shingle on a house because in a driving rain shingles do let water in.

Q. And you do waterproof with your flap? A. Yes.

* * *

[86] Q. In the 1954 Fords, without the cushion, did the wiper arm push against the fabric?

* * *

A. I don't see how it could.

Q. They didn't have the cushion in there in the first place? A. That's right, but when the wiper arm is as close to the fabric as the 1950 Fords, if it did press against the fabric it would be like putting scissors inside the top. You would have a shearing action when the top is going up and down.

Mr. Pollock: I believe there is no purpose in pursuing this, your Honor. We have a witness to the contrary. That's all.

* * *

[89] *Cross Examination by Mr. Wolf*

XQ. Will you tell us approximately what percentage of your business is conducted in your trim shop? A. Oh, a sixteenth of one per cent.

XQ. Do any of the other defendants have anything to do with installations in the trim shop other than as you have already described? A. No.

* * *

[90] XQ. You previously indicated that the performance of the seal as is obtained in a Ford 134—well, a Ford automobile of original manufacture having a cushion, is, I believe, substantially perfect and the performance you

body line where it is attached to the trough, you would have to tear the recess well also, because it is all put on on the same trough. In other words, the screws go into the recess well after the prongs are set.

XQ. Then on the problem of unwarranted access to a car it is much simpler if you intend to break in, to slash the fabric rather than do it the way it is apparently proposed by the plaintiff? A. Oh, definitely. Definitely.

The Court: Take an old car before the days when there was this present arrangement, when there was nothing but some [125] snap buttons on the outside, you could reach in pretty well under those snap buttons, couldn't you?

The Witness: You could, but you couldn't reach any door handles or window regulators.

The Court: What prevented you?

The Witness: Too far away.

The Court: In other words, the length of your arm, or the shortness, rather, of your arm prevented it?

The Witness: Yes, your Honor.

XQ. I would also like you to look at Exhibit 16-B and indicate whether or not you could have reached further into the car at the time that photograph was taken? A. No.

XQ. Will you, for the benefit of the Court, again indicate what car is involved and the condition of the car in that exhibit? A. The 1953 Oldsmobile with the wiper arm removed, I was able to put my hand in up to the knuckles and then the material got extra taut because of the pressure and any more exertion on my part, I would be tearing the fabric, if I was strong enough.

* * *

Further Redirect Examination by Mr. Pollock

* * *

[126] Q. As I understand it, in the tops which had eliminated the snaps and used this long snap, could you get

obtained is about the same; is that correct? A. The ultimate performance?

XQ. Yes. A. Yes.

XQ. What do you mean when you talk about ultimate performance? A. The ultimate performance is that the interior of the car is not damaged by water. The thing is that the Ford did everything in their power to keep as much water as possible out of the car and our purpose was to let it in and direct it out through the drain.

XQ. In the 134 top installed on the 1952 or 1953 Ford—that is your 134—isn't it true all the water running down the top would actually pass between the fabric and the body of the car? [91] A. Yes.

XQ. Isn't it also true in your, I believe it is 224, using a shingle, which we call a shingle, isn't it true there still is a space between the fabric and the body of the car? A. Yes.

XQ. And isn't it true that the water does run down between that fabric and the body in a driving storm or in adverse weather conditions? A. Yes.

XQ. Will you please tell us what the importance of the—if there is any importance to the specific shape of the flap using these tops that you mentioned? I am talking about the flap that extends down inside the body of the car. A. The shape of the top is not important. It could be 4 inches longer and 3 inches narrower. It could be—it is not important as long as there is enough fabric if it wants to be secured down below, if there is enough fabric for it, but the actual shape is not important.

XQ. Have you varied the shapes yourselves, Aro Manufacturing? A. I would say that we have over the period of the years these were manufactured.

XQ. Does the Ford shape vary from the General Motors shape? A. No. Only the size. The shape is pretty nearly the same.

a wire or tool in through such a structure, assuming that the wiper arm was removed?

* * *

Q. In other words, it would be difficult to get a wire or auxiliary tool in? A. Yes.

Q. Is this merely because the fabric is fastened to the trough? A. Yes.

* * *

[127] EDWIN S. BOOTH, Sworn

Direct Examination by Mr. Pollock

Q. Will you please state your name and address? A. Edwin S. Booth, 530 Sunset Avenue, Lagrange, Illinois.

* * *

Q. Would you please summarize for the Court's benefit your educational and technical background? A. I graduated from Rose Polytechnic Institute with a Bachelor's Degree in Mechanical Engineering in 1927. I graduated from Georgetown Law School with an LL.B degree in 1933, and I have been practicing patent law since that time.

* * *

[128] A. [Continued.] If I understand the question correctly now, it is what I regard to be the novel subject matter of the Mackie-Duluk patent?

Q. Exactly. [129] A. The novel subject matter of the Mackie-Duluk patent relates primarily to a fabric for use on a convertible automobile top, which is of a special shape and which is provided with a flap extending down into the body below the belt line and permanently secured to the body, and which cooperates with a wiper arm movable with the bow structure to engage the inner surface of the flap as the top is raised and hold it over toward the inner side wall of the body.

XQ. In any of your fabric tops where you have no shingle and where you do not use a shingle, is there any extra thickness of cloth [92] in any area of the belt line of the automobile once the top is installed? A. No.

XQ. Where you use a shingle, where is that located with respect to the belt line? A. The shingle is above the belt line.

XQ. Can you give me an estimate about how far above it is? A. I would say it stays about—finished on the car, about ½ inch above the belt line.

XQ. What is the space between the fabric and the belt line in, for example, a 1953 Pontiac? A. I would say about 3/8 of an inch.

XQ. How long a space is that? Over what length? A. About 12 inches.

[93] XQ. Have you seen fabric tops of original installation, say, 1953 Pontiacs? A. Yes, I have.

XQ. What is the space in that type of car? A. This is when the top is taken off?

XQ. I'm sorry. In connection with the car of original installation, say, a 1953 Pontiac, using a cushion, what type of space is there? A. There is absolutely no space.

XQ. Could you say that these last few questions that I asked you with respect to a comparison of your fabric top and a comparison of the original installation holds true for the General Motors line of 1950 to 1953, inclusive? A. Yes.

XQ. How about 1954 Chevrolets and Pontiacs? A. 1954 Chevrolets and Pontiacs? General Motors changed their construction to a shingle and did away with the wiper arm and installed a permanent plate.

XQ. I would rather get into that on direct. With respect to the Ford Motor Company cars of 1952-1954 and 1955 Lincoln, would you say that your statements that you just made are also correct? A. The 1952 and 1953 Fords

[131] Q. Have you ever had occasion to analyze the claims of the Mackie-Duluk patent, in the light of the structure which you say you saw? A. Yes, I have.

[133] Q. Would you give the Court a detailed discussion of the results of your analysis, please? A. Well, turning first to Claim 3 of the patent, I have broken this down into an introductory portion, which simply says: "In a convertible automobile body, the combination of"—and which sets the background for the claimed structure. The first actual element defined is "a lower metal body structure or tonneau having a body panel," which is colored brown.

The second element is "a folding bow structure supported by the tonneau," which is colored blue.

The third element says "having flexible top material supported by the bows" which I have colored a sort of a light green.

Those three elements, I might say, are basic elements of every convertible automobile structure and do not characterize the novelty of the Mackie-Duluk patent other than to provide the environment and setting for it.

[134] The drawing cannot show operation of the bow, but in the actual automobile, which I saw, when the top was raised the bow did swing up along the inside of the downwardly extending flap and pressed it toward the tonneau or top belt line of the vehicle's body, tending to produce an effective [135] seal at that point.

Q. So when you say that the top material was pressed outwardly by the wiping arm, did you actually observe that? A. It appeared to me that the wiping arm did press the material outwardly as it wiped up over it.

did have a considerable space between the wiper arm and body; and the 1954 Ford, the space was much closer together.

[94] XQ. In the 1952 Ford, for example, and 1951 General Motors, was the tightness between the wiper arm and the body line merely one of a closure or one of substantial grip? A. This is on original manufacture?

XQ. Yes. A. It was one of substantial grip.

XQ. Would you say then that there was a clamping action? A. Clamping action, yes.

XQ. You examined the Mackie patent just a few minutes ago. I think you looked at Figure 2. Will you open it up to Figure 2? If you will look at the in-leaning fin called No. 27, you will notice it is somewhat deformed.

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[95] XQ. Would you read to the Court in Column 3 of the Mackie patent, beginning with Line 10?

A. "In the construction shown in Fig. 1, the toggle arms fold up to the near straight line position and the wiping arm 10, with its struck out boss 11, wipes against the top material 28, pressing this firmly against the in-leaning fin of the weather strip, pressing that fin outwardly as shown in both Figures 2 and 8. This firmly holds"—

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[96] XQ. I would like to call your attention to the depositions which you gave on October 4, 1956,

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tell me if you recall whether these are correct. This is page 84 on the recross examination:

"Q. [By Mr. Wolf] There was one statement that was made to you and you more or less assented, at the end of the redirect examination, that in effect, at least I understood it to be, whether or not tops are made with shingles or cushions or without shingles

Q. Did this top fabric have a cushion on it? A. No.

• • •

[137] Q. You have discussed Claims 3, 4, 5, 8 and 9 of the Mackie-Duluk patent. Is that correct? A. That is correct.

Q. Do any of these claims recite the provision of a cushion or a weather strip or a sealing strip or anything of similar nature? A. No, they do not.

The Court: Do any of them fail to mention that there will be either a water-tight seal or a weather seal?

The Witness: Claim 4 simply says at the end of the claim, in raising the top to seal the joint of the top material with the adjoining top of the tonneau.

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[138] The Witness: When your Honor says that word "seal" has a definite meaning, I am not sure that I fully understand. The term "seal" as I gather from the patent, in the light of the subject matter of the patent, means that the flap material is close enough to the side wall of the body structure to prevent access by a human hand to get into the car and to prevent access of a sufficient quantity of water to flood the interior of the car. In other words, to limit the quantity of water which can enter the car to an amount that the rain gutter can carry away.

The Court: That is the water seal or weather seal?

The Witness: Yes, that's correct.

The Court: You say "seal" also means to keep the hand out?

The Witness: Yes.

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[139] The Court: Are you qualified to say whether, without this, one could reach into a car and unlatch the door?

The Witness: Not as a technical expert, your Honor.

The Court: All right. As a patent expert would it

or cushions is immaterial. Would you say that is accurate?

Mr. Pollock: I think the background of the question was, if we were driving in a rainstorm, the functioning of the top under those circumstances.

Q. Did you say it would or it would not? A. I would say with the cushion there would be less tendency of water getting into the trough, but the fact that it goes into the trough and goes out satisfies us.

Q. In other words, in answering that you were talking [97] about net results? A. Net results, yes." Is that statement correct? A. Yes, it is.

• • • •

XQ. Would you consider the specific method of effecting the closure or treating the area between the fabric and body line the same when you use your 134 top on a 1952 Ford as compared with an original 1952 Ford? A. No, it is not the same.

XQ. What is the difference? A. On the original, the 1952 Ford, the cushion was installed by the factory to cause a weather-tight seal and our method of installation or the way we make tops is not to cause a weather-tight seal but let it go in, the water go in and go out the trough.

XQ. How much space is there between the fabric and the body line when you use Aro? A. What year?

XQ. 1952. A. I would say enough to get your finger down through. Between 3/8 and 1/2 inch.

[98] XQ. I would like to clarify certain apparent misunderstandings of structure. Could you clearly describe the 1950 to 1953 General Motors cars with respect to the convertible top assembly? A. Yes. The 1950 to 1953 General Motors cars are constructed of a top consisting of a cushion located at the body line with a pressure bar called the wiper arm pressing against the fabric to cause

be your experience there was a certain amount of seller's talk contained in patents?

The Witness: Yes, your Honor.

Q. What is your understanding of the purpose of the trough? A. The trough is provided for the purpose of catching any water which enters the body of the car between the fabric and the upper belt line of the car. The flap, incidentally, extending from that point and being connected to the trough, will direct that water into the trough so that it can't get out into parts of the car where it is not desired to have water.

Q. Isn't the trough a meaningless element if a cushion is provided? A. No, because even with the cushion, according to the patent and according to the statements in the file history, it is quite possible that water would seep between or through that joint, and if it were not carried away it might damage some part of the car.

* * * * *

[141] The Court: Your suggestion is if there was no wiper arm and the flap just merely hung down inside, a great deal more water would get in?

The Witness: If the flap hung loosely, your Honor?

The Court: And was not extended, but just cut off.

The Witness: Oh. Well, that would be my opinion, your Honor, and also there would be nothing to guide whatever water did enter into a place where it could be conveyed away.

The Court: In other words, my old car which had snaps, if I left the snaps unsnapped and the top got inside of the tonneau, that is, the shirt tail, so to speak, was just long enough to get inside the tonneau and it rained hard and the wind blew, a good deal of water would get in?

The Witness: I would think so.

The Court: I should so find.

* * *

a water-tight seal, and this cushion is located half above the tonneau and half below the tonneau if installed correctly, causing the weather-tight seal.

XQ. In that particular construction, would you estimate the distance between the wiper arm and the body of the car? A. I would say about 3/8 to 1/2 inch.

XQ. Would you estimate the approximate thickness of the cushion itself? A. About 1/2 inch.

XQ. How long was this cushion? A. It varies on certain models. 224, which is 1950 to 1952 Chevrolet, Pontiac, and Olds 88, would probably be about 14 or 15 inches long. On a 1953 Oldsmobile it might be 10 inches long and on a 1953 Chevy it might be 11 or 12 inches long.

XQ. Where does the forward end of the cushion terminate in these constructions? A. At the—just clearing the pillar post at the forward end.

XQ. How about the rear end of these cushions; where does that terminate? A. That terminates at the belt line where the fabric starts to [99] tack on the outside.

XQ. Is there any significant space between the body line and the fabric beyond the ends of the cushion in these constructions? A. No. That is where the fabric comes from the inside of the car and goes to the outside of the car. Sort of a hook affair.

XQ. Did General Motors, in any of these original constructions, use fabric without a cushion, to your knowledge?

A. Yes. In 1954.

XQ. I am talking about 1953. A. No.

XQ. And 1950, 1951 and 1952? A. That's right. 1950, 1951, 1952, 1953, on all cars and some—no. On all cars, 1950 to 1953.

* * *

XQ. Will you please describe the construction of those in 1954? A. The construction of the 1954 Chevrolet and Pontiac, they utilized—excuse me, I'm sorry, I made a

[142] A. [Continued] The second advantage is that the device weather seals as well as fastens the material to the top of the tonneau in a way that is not afforded by previous structures. That advantage, as I read the patent, is derived primarily, if not entirely, from the shape of this fabric.

The fabric, when the top is raised, stretches fairly close to the top of the tonneau of the car and if it does not actually make a water-tight seal, it limits the space at that point to a small enough space so that an excessive quantity of water will not enter the car.

[143] Furthermore, it directs what water does enter the car into the rain trough or gutter where it is carried away without damaging anything.

The third advantage stated is that the material is locked in place so that it is not possible to release it to reach into the interior of the car to unlatch the doors. That we have discussed previously as being afforded by the fabric.

Q. The analysis you have given up to this point related to a 1954 Ford with a top 134 thereon; is that correct? A. Well, we were discussing that and the patent itself.

* * *

[146] *Cross-examination by Mr. Wolf*

XQ. Mr. Booth, how much time have you spent in examining actual Ford and General Motors cars in connection with this particular case? A. Not a great deal, not more than a couple of hours, probably.

XQ. How many cars have you looked at in connection with your examination? A. Probably not more than three.

XQ. Can you tell us what cars you have looked at? A. Well, the 1954 Ford, equipped with an Aro Top. I have probably spent more time examining it than any others. I have examined a 1954 Chevrolet, the one I mentioned awhile

mistake. The 1954 [100] did not use a wiper arm, Chevrolet, Pontiac.

XQ. What did the 1954 Pontiac and Chevrolet use? A. They used a stationary bar approximately 7 or 8 inches long with about 5 or 6 screws, and it screwed to the body in a stationary position.

XQ. Well, did it screw to the body—where did it screw to the body? A. Below the belt line, between the top and the tonneau.

XQ. There was a trough on this particular construction? A. Yes.

XQ. There were folding bows on this particular construction? A. Yes.

XQ. And the fabric top had a portion extending down into the car? A. Yes, it did.

XQ. This pressure bar or heel plate extended across the fabric above the top? A. That's right.

XQ. And screwed directly to the wall of the car? A. Yes, it did.

XQ. What was the difference between the fabric top made by General Motors for the 1953 and 1954 Pontiac as compared with the 1954 Pontiac—Pontiac and Chevrolet, both? A. The 1954, the cushion was dropped and substituted by a shingle.

[101] XQ. In 1954? A. In 1954.

XQ. Now, other than that were there any significant differences? A. No, sir. The tops are interchangeable in 1953 and 1954.

XQ. Isn't it true that in 1954 there was no construction which used a wiping arm pressing the fabric against the body line? A. That is true.

XQ. In respect to the 1950 to 1953 General Motors cars of all designs and the 1954 Chevrolet and Pontiac, is it not true that the folding bow mechanism was substantially the same as it had been for many years? A. Yes.

ago, and I have also examined a 19—I believe it was a 1953 Oldsmobile.

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XQ. So the only top you have ever seen, actually identified, is a Ford automobile having what you consider to be an Aro top? A. That's correct.

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[147] XQ. You took his word for the fact it was an Aro top, that it came in the box he indicated to you? A. That's right.

XQ. You would have no way of knowing exactly what the usual spacing is other than from that one examination? A. That's right.

XQ. I see. On this particular car you saw, would you please describe the fabric top itself? I will restrict my examination at the moment at least to the 1954 Ford that you saw. A. Well, the fabric was, as far as I could determine, similar to this fabric we have here in court, which is an exhibit.

Mr. Pollock: Plaintiff's Exhibit 11.

The Witness: Plaintiff's Exhibit 11.

A. [continuing] The part to which I paid most attention was the rear quarter. There was a flap which apparently was identical or extremely similar to the flap on this fabric, Exhibit 11, which extended down inside of the car, below the belt line, and between the body of the car and a wiper arm attached to the linkage. That fabric was secured by several screws to a rain trough mounted on the inside of the car below the belt line.

XQ. This particular fabric to which you refer, do you recall whether it was a single thickness of fabric in this flap? A. The flap itself?

XQ. Yes. A. No, I can't say that I do.

[148] XQ. Do you recall whether or not there was a cushion on it? A. There was no cushion.

XQ. Has it been the same since? A. Yes.

XQ. Could you describe the variations of the body lines of these cars from year to year? A. The body lines? You mean the way it is fashioned?

XQ. The shape of the tonneaus in this area with which we are concerned. A. They are basically the same.

• • •

[102] A. I am not a linkage expert. As far as I am concerned, the folding mechanisms are pretty uniform in all convertibles and they have been for years, but the way it is installed in the lower quarter section, on the trough, there are these very, very sharp prongs and the flap that goes down inside is pressed over these prongs, and the prongs pierce the fabric and it is held in position. Then the prongs are bent down in order to form a locking device.

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[103] XQ. Well, in these Ford Motor products did all of them have wiper arms? A. Yes.

XQ. What kind of fabric tops did the original cars have? A. I don't know what you mean by fabric.

XQ. I'm sorry. Did the fabric tops of original installation use cushions? A. Yes.

XQ. Which years and which models? A. The 1952 and 1953 Ford, Mercury, and Lincoln; 1953, 1954, and 1955 Lincoln used cushions at the lower quarter section tonneau, and the 1954 Ford and Mercury, the cushioning part was left out but the pattern of the top itself at that section was not changed.

XQ. Well, isn't it true that there was a folded over portion in that area in the original installation? A. Yes.

XQ. How many thicknesses of material were there in the 1954 cars? A. 1954?

XQ. In the area of the belt line? A. I would say four.

XQ. Isn't it true that the only difference then was in

XQ. Was there a flap or shingle? A shingle? A. No, there was not.

XQ. From your examination of the particular top that you saw, would you conclude that no effort was made to provide in this particular top a seal in the sense of closing the distance between the wiper arm and the body line? A. Well, I saw no evidence of any effort to obtain a seal.

XQ. Now you say you have never seen a cushion in the sense we have been talking about it until you came in here today, is that correct? A. In the top I could identify as an Aro top, that is correct.

XQ. Have you ever seen what we have been terming here a cushion? A. Yes.

XQ. Where have you seen it? A. In the 1954 Chevrolet I mentioned and in the Oldsmobile.

XQ. Let us consider the Chevrolet momentarily. Did you take a very close look at the inside of the Chevrolet? A. Well, I got into the car and looked over the back seat and examined everything that I could see, and felt around a little bit.

XQ. Are you sure it was a 1954 Chevrolet? A. Well, that is my present recollection, Mr. Wolf.

XQ. Is it possible it could have been a 1953 Chevrolet? [149] A. It is possible but I don't think it was.

The Court: How would you know?

The Witness: I relied primarily on the owner of the car, your Honor. My recollection is that he told me it was a 1954.

XQ. Other than a hearsay statement, you do not know for sure? A. Not other than that.

XQ. I see. Let us consider—what was the other type of car? A. Oldsmobile.

XQ. 1953 Oldsmobile? A. I think it was a 1953. It could have been a 1952.

the 1954 original installation fabric tops, they took out the resilient cushion from its pocket? A. Yes.

[104] XQ. What would you estimate the space to be in those cars you have seen of 1952 and, say, 1953 Fords between the wiper arm and the body? A. About 3/8ths of an inch.

XQ. How thick would you estimate the fabric that you use in your top to be in the area of the belt line between the wiper arm and the body, the belt line when it is installed in the Ford? A. About 1/8th.

XQ. Is this distance always that small or does it get larger or what? A. It varies. It goes anywhere from a half inch to 3/8ths of an inch.

XQ. Is there any impediment in the flow of the water down the fabric when you have your fabric on these cars? A. No. We have considerable space, and the water goes through freely.

XQ. I am talking about an impediment between the body line and the fabric of the car at its closest point. A. There isn't any.

XQ. Is there any impediment in the flow of the water which happens to strike below a shingle in those models in which you use a shingle when it flows downwardly between the body of the car and the fabric? A. No.

* * *

[107] XQ. You then indicate that if there is any overflow over the sides of the trough, if the trough isn't large enough to accommodate the flow of the water, this overflow will flow into the fender well or the recess well and hence out of the car and will cause no damage whatsoever? A. Yes.

XQ. Is that right? A. Yes.

XQ. Is that what you meant before when you said that the net effect is the same? A. Yes.

XQ. Did you make any examination of any of the cars as to the [150] specific distance between the wiper arm and the body of the car? A. No. Well, yes.

XQ. In the sense of actually removing the fabric to see what the space was? A. No.

A. Well, on the Ford, I tried to feel with my fingers, and I also tried to insert a paper matchbox between the fabric and the side wall.

XQ. That is on the Ford? A. Yes. On one side I could not get the tips of my fingers down beyond where the wiper arm, the top of the wiper arm is. I could get a match, a paper matchbox into that space. On the other side, I could not get the paper matchbox in.

XQ. In the GM car, the Oldsmob., did you notice the spacing there? A. No. I did not.

XQ. It was wide enough so that it accommodates a cushion? A. There was a cushion in there.

[151] XQ. Are you aware of the fact that there is a difference of construction between the 1954 Ford and the 1953 Ford and the 1952 Ford? A. So far as the top is concerned?

XQ. So far as the spacing between the wiper arm and the body line is concerned. A. Well, I have been told that the 1952 and 1953 Fords used a cushion in the fabric which was omitted in the fabric for the 1954 Ford.

XQ. Would you say it would be impractical or impossible to put a cushion on to the car, the Ford car that you had examined? A. It would have been a pretty thin cushion.

XQ. I would like to go back to the patent, the file wrapper. I refer you to certain drawings that appear

XQ. As far as weatherproofing the car or making it watertight? A. Yes.

[108] *Redirect Examination by Mr. Pollock*

Mr. Pollock: That is my understanding, your Honor.

Q. Mr. Shapiro, I would like to invite your attention to some prior testimony which you gave in your deposition of October 4, 1956. I first invite your attention to Page 43 of that deposition. Would you read the question by Mr. Wolf that is underlined, and the answer?

"Q. Mr. Shapiro, will you please name those cars of original manufacture which use wiper arms and cushion? A. 1952, 1953, and 1954 Ford and Mercury. 1952 to 1955, inclusive, Lincoln. 1950 to 1953 all General Motors, and including the 1954 Chevrolet and Pontiac."

Q. That is, as I understand it, you testified then the 1954 Chevrolet and Pontiac did have a wiper arm and cushion? A. Yes. That was in 1946 when the deposition was taken.

Q. 1956. A. 1956, I mean. Excuse me. But since then we have looked into it a little further, and every 1954 Chevrolet and Pontiac that we have found so far to my knowledge has had the permanent [109] bar there, without a wiper arm.

Q. I invite your attention to Page 49 of this deposition. Would you start with this question and read the answer?

"Q. Now, will you please summarize those cars which in their original manufacture used wiper arms of the general type shown in the patent owned by the plaintiff and subject to the present civil action? A. 1952, 1953 and 1954 Ford and Mercury, and including 1955 Mercury. Is that plain enough?"

in the file wrapper of this particular case. There are some drawings in there. Will you please open it to the file wrapper, which shows these drawings?

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[152] Mr. Wolf: I refer you to Page 43.

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XQ. Can you identify it? A. Well, this is a drawing filed with one of the amendments purporting to show a construction then being made by General Motors Corporation.

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XQ. For identification, could you mark on the exhibit Figure 1, as the drawing 1 on the left, showing the side view of the car? A. Yes.

XQ. Could you mark the other one as Figure 2? A. Yes.

XQ. And could you also mark the section lines as 2-2? A. Yes.

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[153] XQ. Figure 2 corresponds in substance, does it not, to Figure 2 of the Mackie-Duluk patent? Am I correct in making that assumption? A. It is a section of the same type taken in approximately the same place.

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[156] XQ. Examining that particular construction would you conclude that it is in substance identical with the Mackie and Duluk patent construction as shown in Figure 2? A. Well, it is not identical in that Figure 2 of the patent does not show a cushion in the fabric, as is shown in the drawing.

XQ. Is Figure 2 shown in place of a cushion? A. I don't know. Well, Figure 2 shows a sealing strip 27.

XQ. Does that perform the same function as the cushion? A. I presume so, yes.

XQ. Would you conclude that the cushion and the sealing strip are in fact equivalents? A. Yes.

Q. That should be "and including 1955 Lincoln." I believe you misread it. "and including 1955 Lincoln." A. Yes.

"Is that plain enough?

Q. 1952 to 1954 Ford and Mercury, and 1955 Lincoln? A. Yes. This is just the wiper arm?

Q. That is right. A. 1950 to 1953, inclusive, General Motors and including 1954 Chevrolet and Pontiac."

[110] Q. I invite your attention to Page 52 of this deposition. I invite your attention to this question and answer. Would you read the question and answer?

"Q. Now, the tops you made for the 1954 Pontiac [111] with the wiper arm were what model? A. No. 232."

Q. So you said at that point in your deposition that you made a 232 for the 1954 Pontiac with a wiper arm? A. Yes, but—

Q. I ask you to read the next question and answer. A. "Q. With Model 232 or the top which you made for the 1954 Pontiac with wiper arm, were these Pontiacs which had the stationary plate? A. Exactly, identical."

Q. And down here, this question and answer?

"Q. Have you sold some of these Model 232 for jobbers? Do you know whether or not they were being installed on a Pontiac with a stationary plate or a wiping arm? A. No.

Q. Would it make any difference to you? A. No."

Q. Apparently in 1954—excuse me, at least in 1956 you thought that there were 1954 Pontiacs with wiper arms? A. Yes. In other words, when we get an order in the mail to ship out a part No. 232 we don't know whether it is going on a 1953 or a 1954.

XQ. Equivalent in the sense that they provide a weather-tight or watertight seal? A. They at least attempt to.

XQ. In the Mackie and Duluk patent is it not true they talk about deforming the in-leaning fin 27 or this rubber weather strip to obtain the seal? [157] A. That's correct.

XQ. Does this drawing of the General Motors construction disclose the same type of deforming? A. Well, the cushion is shown thicker above the belt line than below it, which would indicate that it has been squeezed below the belt line.

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XQ. Would you say this is a fair representation of the construction you saw in the Oldsmobile? [158] A. Yes, as near as I can tell it is.

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XQ. Would you have any knowledge as to how much space would be required for the fabric, such as is shown in 134, the top of the defendant's construction, between the wiper arm and the body line? A. I could only estimate by looking at the fabric.

[159] XQ. How would you estimate it, from looking at the fabric? A. I would say not over an eighth of an inch, or possibly less.

• • •

XQ. Would you please enumerate what you would consider to be the function of the wiper arm in this particular patent disclosure? A. The function of the wiper arm, according to the Mackie-Duluk [160] patent, is to press the fabric over toward the inside belt line of the car to effect a seal.

XQ. What is the patent saying about the positioning of the fabric toward the body line? A. Do you want me to read the part where it talks about that?

XQ. Would you, please? A. In column 3 of the patent, starting in line 7, it says:

Q. Well, of course, all these questions were asking about 1954 Pontiacs. [112] A. We wouldn't know. We use the same top for both.

Q. This stationary plate which you have been speaking about, did it have the same function as the wiper arm, as the movable wiper arm? A. No.

Q. What was the function of the stationary plate? A. I don't know. All it did was press the fabric in—in this deposition it says at the belt line. It is well below the belt line. It is in between the trough and the belt line.

Q. The stationary plate actually pressed the fabric in? A. Yes.

Q. What did the wiper arm do? A. The wiper arm pressed the fabric against the tonneau.

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Q. The stationary plate pressed the fabric up against the belt line? [113] A. I think so.

Q. You so testified previously. Did you see that? A. Well, since that testimony I have had an opportunity to examine these cars a little more closely.

Q. I believe you said that without the cushion there was enough of a gap in your 134 to get your fingers down through?

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A. Yes. No. Get my fingers in—what part of my fingers?

Q. What do you mean by "your fingers" and "down through"? A. I don't mean my hand. I mean my finger tips. When I said the space was 3/8ths of an inch to a half inch, that is about the width of my fingers.

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[114] Q. So that with the wiper arm in place this has no cushion in it here? A. That's right.

Q. Only the tip of one finger, and with the wiper arm removed you get your whole hand in, is that correct? A. Yes.

"When the top is raised by raising the main bow 1 and the other connected bows (not shown) the material is stretched as shown in Figs. 2 and 8. In the construction shown in Fig. 1, the toggle arms fold up to the near straight line position and the wiping arm 10, with its struck out boss 11, wipes against the top material 28, pressing this firmly against the in-leaning fin of the weather strip, pressing that fin outwardly as shown in both Figs. 2 and 8."

XQ. Isn't the function, then, of the wiper arm to press the fabric against the body line, into contact with it? A. He described it here, where that fin is employed the arm is intended to press the fabric against the fin and to deform the fin.

XQ. I didn't ask you to read any specific part of the patent, I just asked you to refer to it. You picked out this portion which said the wiper arm presses the fabric against the body of the [161] car. Do you know of any support for your contentions you have been making, or that have been made, that the object of the wiper arm is to press the fabric close to the body line? A. In the file history, when the claims were amended to omit limitation to a cushion or a sealing element, it was pointed out in the discussion at that point that the sealing element or cushion could be omitted, that its purpose was to compensate—

XQ. I am not talking about cushion or sealing element, I am talking about the function of the wiper arm.

A. About the only explanation of the functioning of the wiper arm in the specification itself is the statement I just read to you.

XQ. Let us turn to the file history of the case. Would you please indicate to me what support you can find in

[117] Q. Now, I noted in your cross-examination that you said that the gap was such that all the water that ran down the fabric could get into the trough; is that correct? A. On the Fords, yes.

Q. When you are actually out in a rainstorm, does all the water that hits the top run right down the fabric? A. Driving or standing still?

Q. Driving along. A. No.

Q. Some of the water bounces off? A. Bounces off or goes to the rear.

[118] Q. I invite your attention to your deposition of October 4, 1956, at page 83. Would you read this question and answer, please? A. [Reading]:

"Q. I see. Now, you were speaking of how the various tops would operate in a driving rainstorm. As a matter of fact, in practice, if one of your 134 tops, without any cushion or flap, were placed on a car and you were driving in a rainstorm, driving the car along, some rain would hit the top material and bounce off? A. What top material?

Q. Rear quarter? A. I doubt it. Yes, it would run off, I imagine."

Q. Go ahead. A. [Reading]:

"Q. And some of the rain would also go into the possible gaps between the material and the belt line of the car? A. Not very probable. It would be more so if it [119] were standing still."

Q. Have you testified there when you are driving along with the top fabric with no cushion and no flap, have you testified it would be not very probable for water to get in that gap? A. Not as much water.

The Court: The General Motors original top, you say in 1953 that the cushion was part of the design?

The Witness: Yes, your Honor.

The Court: Now, in Exhibit No. 7, if I remember correctly, your brochure does not advertise your replacement was the same as the design of the original top?

[120] The Witness: Yes, your Honor.

The Court: And did you so advertise when you omitted the cushion?

The Witness: No, your Honor.

The Court: You no longer so advertised?

The Witness: No. We advertised that before we were notified of any infringement. We had no idea this was an infringed article.

The Court: In order to avoid the possibility of infringement you would omit the cushion and no longer advertise your tops followed the original design?

The Witness: I think at that time we changed our whole catalog sheet and didn't make any mention of what was on that original one.

The Court: All right.

Recross Examination by Mr. Wolf

XQ. I would like to refer to these exhibits 15-A and B and 16-A and B. I hand you Exhibit 15-B. Would you tell me whether or not that was as far as you could push your hand at that time? A. I believe it was.

XQ. Do you recall whether or not you actually were able to touch the screws or any other objects which secured the fabric down below the body line? A. I possibly could touch the prongs or where the fabric met the gutter, but in doing so, so much pressure would have to be exerted [121] it might tear the fabric from the channel—gutter.

The Court: Could you reach the handle of the door?

The Witness: No.

The Court: Could you reach the lock of the handle of the door?

The Witness: No, your Honor. You can't reach inside the car at all. It is only between the cloth and the outer shell.

The Court: What is it that prevents your doing that, the wiper arm or the fact that the flap extends down?

The Witness: On this photograph, your Honor, the wiper arm is removed for demonstration purposes.

The Court: Then the answer to my question which you are implying is that it is the downward extension of the flap which prevents your getting into the car?

The Witness: Yes, your Honor.

* * *

[122] XQ. How would a trim man normally remove the fabric from the trough when he is going to replace it? A. He would get in the back seat, reach down, unscrew the recess well, and then pull the bottom flap toward him, and that in turn would pull the prongs out in a straight position and the material would slip off.

XQ. What tools would you normally use? A. Just a screwdriver for the recess well.

* * *

[124] XQ. And you say this cover material is also secured in this area? A. That's right.

XQ. And it is secured to the back rest, the bracket and the back rest? A. The back rest bracket.

XQ. How is it secured? A. Well, in some models screwed, and others it is cemented.

XQ. To gain access to an area in the back of the front seat you would have to not only get through the flap in the trough area but also through this cover material on the inside; is that correct? A. Yes. If you are able to reach inside of 134 and release the fabric below the

up against the body line? A. Yes, that is what it disclosed.

XQ. Isn't this a clamping action? A. Well, I think we are fighting over words. I don't mean to do that with you.

The Court: I think he is troubled about, or what I would be troubled about, is your suggestion there was a seal, even though there was 3/8 of an inch space between the two, because, within the meaning of the specifications the word "seal" is sufficient if it covers the fact that you can't get your hand in. I think that is what counsel pretty well talked you out of at the moment. I would like to do it a little further. Is my bedroom sealed if I have the window open but a screen to keep the mosquitoes out?

[165] The Witness: It is sealed against mosquitoes.

The Court: Would you ever use that word in common parlance?

The Witness: Probably not.

* * *

[166] XQ. Mr. Booth, would you explain just what a file wrapper and content of an application is? A. The file wrapper and content is a copy of all the papers filed in the Patent Office in connection with the application and the prosecution of the application, bringing it up to the point where it results in the issuance of a patent.

XQ. It includes all the contentions and arguments of the patent applicant? [167] A. Yes.

XQ. As well as the reasons for rejection? A. Yes.

* * *

XQ. You would conclude that the original application is in substance the same as that issued, ultimately issued? A. Yes.

[168] XQ. Now would you please turn to page 19 of the file wrapper? A. Yes.

XQ. Would you please identify what portion of the file

wrapper this page constitutes? A. Well, it is essentially the remarks made by the attorney in connection with an amendment filed before there had been any action on the application by the Patent Office.

XQ. Would you please read the remarks if there are only two sentences, the first two sentences? A. [Reading]:

"After the filing of this application it became apparent that some of the claims of the application as filed were not of the proper breadth. The sealing strip may be alternatively upon the top of the tonneau or on the folding top material."

XQ. From your examination of this patent and the file history, would you agree with the second sentence? A. Yes.

* * *

[172] XQ. I am trying to determine how broad these claims are to which he refers. He says that they are entitled to broad claims that will cover all forms of this automatic sealing device. What is the scope of the broad claims he is referring to in connection with this automatic sealing device? A. Well, the claims then in the application all called for some kind of a sealing means, whether on the fabric or on the body of the car itself.

[173] XQ. That was an actual closure, is that correct, barring of course incidental seepage perhaps? A. Yes, a flexible sealing element of some sort.

XQ. Would you agree with the statement that he makes, and I will quote it, "here one has an automatic seal which is a complete and unfailing seal under all conditions"? A. Well, that certainly is what he was seeking. So far as the patent is concerned, I would agree with it.

* * *

XQ. Well, he was including that in his claims as one of the elements of his claims? A. Yes.

* * *

[193] XQ. Wouldn't you agree that the whole substance

of this file wrapper is directed towards obtaining a patent with a seal? A. Yes.

XQ. All right. Wouldn't you further agree that they accomplished the seal by pressing the fabric right up against the body by the use of a wiper arm? A. Well, as I interpret the seal, Mr. Wolf, you could have an effective seal for the purpose of the invention without pressing the fabric tightly against the belt rail of the body.

XQ. Did you ever see any language in the file history of this case or in the patent which says that you don't have to press it right up against it, which indicates there can be a space? A. There is language in some of the claims which doesn't require that it be pressed right up against the body.

XQ. That is an interpretation of the claims. I am talking about specific language where they say that it doesn't have to be pressed up against the fabric, doesn't have to be pressed up against the body? A. You are limiting this to the specification itself and to the attorney's remarks?

[194] XQ. And the Patent Office remarks, too, for that matter. A. No. I see no such language.

XQ. In other words, your conclusion that it does not have to be pressed right up against the fabric is one based solely upon your interpretation of the claims? A. That is correct.

XQ. In the absence of reference to the file wrapper or to the patent specification itself? A. Well, the claims of course have to be interpreted in the light of the patent specification.

XQ. You say you find no support for that, for what you are contending, other than the claims themselves? A. I said I found no statement to that effect.

XQ. The statement says, "The seal is actually accomplished by the clamping of the top material 20." Would you agree with that statement? A. Yes.

[195] XQ. Do you know of any other way this fabric could be clamped in the manner to which they refer in that sentence other than between the fabric—other than between the wiper arm and the body of the car? A. Not in the structure we are discussing.

XQ. It is true the patent only teaches the use of the body line and it is true the patent only describes the use of a wiper arm on the body of the car to provide a clamping means? A. Yes.

XQ. Which claims do you consider to be the broadest? A. Well, it is hard to say which precisely is the broadest. I would say Claims 3 and 5 are representative of the broadest claims of the patent.

XQ. Which would you prefer to take for the purpose of examining the scope of the claim? A. Either one.

XQ. 3 is the first. I presume that is satisfactory. Did we not establish that the concept of this invention or this device, the fundamental concept was to provide a clamping or sealing means at the edge of the fabric and the body line? [196] A. Well, to establish a seal at the rear quarter.

XQ. Would you please show me in Claim 3 where this is recited? A. In the last phrase of the claim.

XQ. Would you read it, please? A. "and an arm secured to a bow and operable simultaneously with the bow to engage the inside lower portion of the top material in raising the folding bow structure and produce a weather seal between the top material and the top of the side of the tonneau."

XQ. My understanding was that you had previously testified the idea was to obtain a sealing and the patent and file wrapper speaks of pressing the fabric up against the

body of the car by means of a wiper arm, and it was held there by the wiper arm. Is that right? A. Yes.

XQ. Isn't that clamping it up against the body? A. Yes.

The Court: Isn't the argument going to be "how good [197] a seal"?

* * * *

Mr. Wolf: Your Honor, I will agree with you that there is a substantial question as to how good is the seal, what constitutes a seal, how good a seal there is in these arrangements. It is perfectly clear, of course, we are contending that a seal means pressing the fabric into contact. I think one other thing—

* * * *

[198] XQ: Will you recite the structure which recites the seal once again? A. Well, the statement right at the end of the claim is really an explanatory statement, explaining what happens as a result of operation of the entire structure defined in the previous parts of the claim.

XQ. Isn't it true that the phrase "and produce a weather seal between the top material and the top of the side of the tonneau" is the only portion of this particular arrangement which recites the provision of a seal? A. Yes.

* * *

XQ. Well, in other words, it does define it in terms of what it does? A. I don't interpret that as defining anything. It merely explains what happens. It is explanatory.

XQ. Claim 5, I would presume, recites the same subject matter? [199] A. Claim 5 reads a little differently. Shall I read it?

XQ. Read the portion that you think recites the essence of this invention, the provision of the seal. A. Well, when you say the portion which recites the essence of the invention, I would have to read the entire claim, Mr. Wolf.

XQ. Well, read that portion which is directed towards the obtaining of the seal. Would that still be the whole

claim? A. That is the overall purpose of the invention, as I understand it.

XQ. Do you mean to say then that the tonneau and the fabric and the wiping arm and folding bows are all necessary in this? A. Yes. Without all those parts you don't have a complete operating unit.

XQ. In other words, if you left one of them out it wouldn't work at all? A. That's right.

[202] XQ. You just mentioned that all the elements that are recited in the claim are important. Would you agree that you can't have this seal or the device won't function if you don't have the tonneau, the fabric, and the wiper arm present? A. Yes.

XQ. Have you ever seen a car in which the wiper arm was removed? A. Yes. I saw one last night.

XQ. Would you describe what you saw when the top was raised and lowered? Could you describe what you saw when the top [203] was raised and lowered?

A. Well, when the top was lowered from its raised position it simply folded back into the top well, apparently in the same manner as if the wiper arm had been present. When it was raised, it raised to its upper position. The functioning of the bow structure of the top was apparently the same as when the wiper arm is present, except that on the inside, where the wiper arm was removed, the fabric sagged away from the belt rail of the car.

[205] XQ. You spoke before as to the importance of the fabric itself. You said, I think you used the terms "special shape" and "arrangement formed an important part of this invention or this device; is that correct? A. Yes.

XQ. Could you once again describe what you consider to be the most [206] important part of this particular arrangement of the fabric, itself? A. Well, I would consider the most important part to be the provision of a flap at the rear quarter extending down into the interior of the automobile body and connected at a point below the belt line to the automobile body.

XQ. Will you say that this particular shape could be varied to any extent? A. Do you mean the shape of the extending flap?

XQ. Yes. A. Yes, I would think so.

XQ. Would you say that the length could be longer than that shown in the Mackie patent? A. The length of the flap?

XQ. Yes. A. That it could be?

XQ. Yes, in an embodiment of this particular patent. If you had [207] an arrangement in which the flap was longer. A. I presume that the length of the flap would be designed so that it would be the correct length to fit onto the design of any particular vehicle body and bow structure.

XQ. It could be 6 or 8 inches or 10 inches long? A. Yes.

XQ. Or perhaps 3 or 4 inches long? A. Quite possibly, yes.

XQ. Then the length is really not critical? A. No.

XQ. Is the width critical? A. I would say not.

XQ. The pattern, as I recall, shows two depending portions going straight down on the side edges; is that correct? A. You mean the edges of the flap?

XQ. Yes. A. The front edge appears almost to go straight down. The back edge is cut off at a slant.

XQ. Is that particular portion of any importance? A. You mean the shape of the edges?

XQ. Yes. A. I wouldn't think so.

XQ. You would, then, apparently conclude that the actual shape and area of this flap is really of not any great con-

sequence? A. Well, Mr. Wolf, the shape and area of the flap would have [208] to be designed by the designer or engineer to fit into the particular car for which the top was intended.

XQ. Isn't it important it come down far enough so that you can get the wiper arm on the inside and the body on the outside? A. No. There are other considerations. It has to be of such a length and connected at the proper point so that when the top is folded back you will not tear the top material loose from its fastenings and so that when it is raised, the top material will be stretched relatively taut.

XQ. Are you contending that it is essential that this fabric be secured below the body line? A. Yes.

XQ. You will not be able to effect a seal without securing it below the line: is that right? A. That is my understanding, yes.

[209] XQ. Will you look at Claim 3 of the Mackie patent? Do you have a copy there? Do you see anything in the claim which says that the fabric must be secured below the body line? A. Yes. The element designated by my blue, and the element just above that says that the top material at the rear quarter extends down and is supported by the panel on the inside and below the top of the metal body or tonneau.

XQ. It doesn't say it is secured? Just supported? A. This claim says supported.

XQ. In other words, this claim, the actual fastening of the fabric is not material because it doesn't say fastening, it says supported? A. I read the word "supported" to mean it had to be fastened. It might be interpreted more broadly.

[210] XQ. Well, don't the other claims use the word "fastened"? A. Claim 4 says fastened, Claim 5 says

secured, Claim 6 says—Claim 8, rather, says secured, and Claim 9 says secured.

XQ. You claim that there is no differentiation between supported, secured and fastened, is that correct? A. I hadn't up to this point at least.

XQ. Do you want to reconsider your thought on that at this point? A. I would think Claim 3 would require that the fabric be fastened, Mr. Wolf. It says it is supported by the panel on the inside and below the top of the metal body. If it is not fastened I don't see how it could be supported at that point.

XQ. Isn't it quite conceivable that you can support something on another body, isn't it perfectly obvious, without actually securing it to the body? A. Yes.

XQ. All right. Isn't it quite conceivable that it can be a fabric top, too? A. Yes.

* * *

XQ. I would like to refer now to the trough, which is recited. Do you conclude this is an essential component of the invention?

* * *

[211] XQ. Would you please tell us what the importance of the trough is? A. The importance of the trough, as explained in the patent and file history, is to collect whatever water flows between the fabric and the belt rail of the body and conduct it away, without allowing it to get into portions of the car where it [212] would be detrimental.

XQ. This is a function which is independent of obtaining a seal, is it not? A. Well, I would say it is a part of obtaining the seal.

XQ. Do you mean to say the trough below helps effect the seal above? A. Not necessarily that. But the seal, the purpose of the seal is keeping water out of those parts of the car which might be harmed by water, and it is inevitable that some water will come through between the fabric and

the belt line, even when a cushion is present, and the purpose of the trough is to catch that water and conduct it away in a harmless manner.

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XQ. Isn't the trough working independently then of the seal? The water that seeps through, once it gets through it is drained off by the trough, isn't that correct? A. That's correct.

XQ. It would make no difference if there was no seal up above, the trough would still conduct the water away? Is that not true? A. Well, if there were no seal of any kind up above, if unlimited quantities of water came in, the trough might well overflow.

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[215] XQ. [Continued.] Did you at any time ever see a claim in this application and file wrapper directed to the fabric top alone? A. No.

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Mr. Pollock: With the Court's permission I would first like to read into the record as part of the plaintiff's prima facie case certain portions of the Harold Shapiro deposition of February 20, 1957, which relate to a question of seal.

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[216] Mr. Pollock: The first portion appears at pages 37 and 38 of the deposition.

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Mr. Pollock: The portion in question reads as follows:

"145 Q. When the wiper arm is installed isn't it true by the very fact the top material in your 134 goes down between the belt line and wiper arm there is not much room in there and isn't it true as you raise the top the wiper arm is brushing against the fabric? A. The primary function of the wiper arm is to push against the fabric and make weather-tight seal. It

has nothing to do with the raising and lowering of the top.

146 Q. I am not concerned with the nature of the seal once the top is raised. It is true, of course, is it not, that with no cushion we get an inferior seal with what it would be with the cushion? Isn't that true? A. I would say that you have a better function than with a weather-tight seal. Most 1954 Fords that I have noted had a bunching or a [217] tearing effect on the outside fabric because the seal was too tight, and consequently there was friction between the wiper arm and body line.

147 Q. The top will weather better, maybe last better if the wearing tension is not there? A. And looks better.

148 Q. And maybe look better. But I think it is your contention that you do not get as good a seal, using the word seal for whatever purpose we can use it? A. Weather-tight.

149 Q. Whatever seal you get up here [indicating] is not a water-tight seal? A. That is correct.

150 Q. It is something less than a water-tight seal? A. That is correct."

The second excerpt appears at pages 61-2 of the deposition.

"234 Q. I would like to clarify this sequence. As I recall, you testified that your original replacement top, Part No. '34, had a cushion in it. Is that correct? A. That is correct.

235 Q. When that top was installed on a car in the 1952, 1953 or 1954 Ford model, it gave you a very good seal, water seal, near the belt line? [218] Is that correct? A. That is correct.

236 Q. And then the cushion was dropped and a flap or shingle was substituted for it in your top No. 134? A. That is correct.

237 Q. And that gave you a somewhat poorer water seal? Is that right? A. No.

238 Q. You say that with the cushion you got as good a water seal? With the shingle you got as good a water seal as with the cushion? I am not concerned with the tearing problem. A. No. For our own satisfaction as far as keeping the inside of the car dry, it was as good.

239 Q. How about shedding that water on the outside of the car? A. It did a pretty good job of shedding.

240 Q. Would you say it was as good a job of shedding as with the cushion on it? A. I would say better.

241 Q. You say the shingle did a better job of shedding water off the outside of the car? A. Yes.

242 Q. Than the cushion did? [219] A. Yes.

243 Q. And then you dropped the flap and the cushion and you put nothing in there? A. That is correct.

244 Q. Just relied on the fabric itself? A. That is right.

245 Q. And that did not do as good a job at all of sealing, is that right? A. That is right.

246 Q. But still whatever water got in ran into the trough so you were not really concerned because the inside of the car did not get wet, anyway? A. That is right.

247 Q. So with the cushion and seal gone, it was an interior seal from the point of view of shedding water? A. Yes."

Mr. Wolf: Excuse me. I believe 247 Q, there was an error in the transcript. "Seal gone" should have been "shingle eliminated".

Mr. Pollock: You are quite right. I didn't know whether or not we had agreed on that. In 247 Q, change the words "seal gone" to "shingle eliminated".

the file history of the case that the wiper arm is used to push the fabric close to the body line of the car? A. I was trying to explain, in that amendment, toward the end of the prosecution, the argument was primarily directed to the necessity for the cushion or sealing strip and the attorney pointed out that the reason for the cushion or sealing strip was [162] to compensate for irregularities in the body of the car or in the wiper arm, and that if the wiper arm and body of the car could be made to conform closely enough, the sealing strip could be omitted. In that he recognized that you cannot achieve perfection in manufacture and, as I read that statement, he was saying, in effect, that because you can't achieve perfection in manufacture at reasonable cost, it was desirable to use some element which would yield to take up or compensate for irregularities.

XQ. In so describing this particular portion, isn't it true that the argument was set forth that the intent was still to use the wiper arm to press the fabric into contact with the body line? A. Yes, I think so.

XQ. There is no support for the contention that the fabric was merely to be pushed foward, but still spaced from the body line? A. It never was stated just that way, but I think there is a recognition you cannot achieve perfection.

XQ. We recognize that, but isn't it true that the purpose of the wiper arm is to clamp the fabric against the body line? It may perhaps be imperfect in clamping, but isn't that the purpose of the wiper arm? A. I don't know about the word "clamp". I would say to press against.

XQ. Would you say to seal against? A. Yes.

XQ. Isn't sealing accomplished by clamping, in this instance? [163] A. Clamping, to me, implies a tight gripping.

XQ. Isn't that the intent of this particular patent? A. Not as I understand it.

XQ. Wasn't the whole purpose of this arrangement to provide a clamping arrangement? A. Not clamping in the sense that I understand the word.

XQ. How do you understand the word "clamping"? A. A tight gripping to withstand a mechanical strain. In this case, whatever mechanical strain is present on the fabric is taken by the fastening to the rain trough and the pressing of the fabric to the top is only to exclude weather and assist in excluding unwarranted access.

XQ. Well, pursuing this question of what constitutes a seal somewhat further, isn't the—First, let us ask, is it not true that the intent of this arrangement was to obtain the seal by actually pressing the fabric into contact with the body? A. That was the intent, yes.

XQ. Isn't the purpose of the cushion or the in-lying fin merely to take up for seepage and that sort of—variation in body manufacture? A. When you say seepage, as explained in the file wrapper, it was to compensate for irregularities in the space between the body itself and the wiper arm.

XQ. Which might cause some seepage? A. Which might result in seepage or even leakage.

[164] XQ. Isn't it true in the prosecution of the case the attorneys for the patent applicants urged that the intent here was to obtain a seal and it didn't make any difference whether you used a cushion or an in-lying fin if you got that seal? A. That's correct.

XQ. The whole purpose was to obtain a seal? A. That's right.

XQ. And you could dispose with the cushion or fin if you obtained the seal? A. I would read it that way.

XQ. Isn't it true, therefore, the principal way of obtaining the seal was to press the fabric from the inside right

claims are meant to encompass different degrees of sealing? A. Yes.

[226] Q. Now in the course of your examination concerning the file wrapper, I believe you stated that up to a time at least every claim in the case was concerned with a sealing element or a cushion? A. That is correct.

Q. Were the claims ever amended in this regard? A. Yes.

Q. What is the date of this amendment? [227] A. It is stamped with the United States Patent Office stamp May 28, 1951. A number of the claims were amended in that amendment to eliminate all reference to the sealing strip.

Q. Was the sealing strip as an element of the claims expressly removed from the claims? A. Yes.

[230] EDWIN C. PICKARD, Sworn

Direct Examination by Mr. Pollock

Q. Would you please tell us your name and address? A. My name is Edwin C. Pickard. I live at 16543 Bayless Avenue, Detroit 21, Michigan.

Q. How old are you, Mr. Pickard? A. I am sixty-four years old.

Q. Are you employed at the present time? A. No, I am not.

Q. Are you retired? A. I am retired, as of July 31, 1957.

Q. What did you do before you retired? A. I worked at the Ford Motor Company.

Q. In what capacity? A. I was chief engineer of the Ford Motor Company, of the Trim Engineering Section.

Q. In what capacity what were your duties? A. My duties were that of head of the Trim Engineering Section of the Body Engineering Department, and as such I had supervision of all the interior trim for all products that

Ford Motor produces, Ford cars, Ford trucks, Mercury, Lincoln, and Continental and the new Edsel.

* * *

[231] Q. As chief of the Trim Engineering did you have any people working under you? A. Yes. I had approximately 125 people working for me.

Q. How long were you with the Ford Motor Company? A. 9½ years.

Q. Had you prior to that time done any other work in the automobile field? A. Yes. I had been in the automobile field since 1910.

Q. Would you summarize for the Court's benefit what companies you have worked with over that period of time and how long you were with them? [232] A. I started in the trim business in 1909 with the Pontiac Buggy Company of Pontiac, Michigan. In 1910 I went to work for the C. V. Taylor Company in Pontiac, working on automobile tops. In 1951 I went to work in Detroit for the American Auto and Trimming Company and there I was supervisor. In 1921 I had a trim shop of my own in connection with a paint section. In 1922 I went to work for Hub Motor Company as trim engineer and when the Murray Corporation took over the building of bodies in 1925 I transferred to the Murray Corporation. In 1928 I went with the Edward G. Budd Company as trim engineer. In 1930 I went to the Hudson Motor Car Company, working for the factory manager as special assignment for him. In 1934 I went to work for the Packard Motor Car Company as chief trim engineer on their new 120 car that they were bringing out. In 1945 I went to the Chevrolet Light Car Division which was a new division established to develop and bring out that small Chevrolet car which they never did build. In 1948 I went to the Ford Motor Company as chief trim engineer and was there until I retired.

Q. Are you a member of any engineering society? A. I

am a member of three engineering societies, the Society of Automotive Engineers, a member of the Engineering Society of Detroit, and I am a member of the American Society of Body Engineers.

[233] Q. Are you familiar with what General Motors was doing in the convertible automobile field during your period of employment with them? A. Yes, I was.

Q. Are you familiar with what they were doing in the convertible automobile field prior to your period of employment? A. Yes.

Q. Are you familiar with what General Motors was doing in the convertible top and convertible automobile field after you left their employ? A. Yes, I was.

Q. You say you also worked for the Ford Motor Company? A. Yes, sir.

Q. Are you familiar with what that company was doing in the convertible top field during your period of employment with [234] them? A. Yes, I am.

Q. Are you familiar with what they were doing before and after you were in their employ? A. Yes, sir.

Q. Mr. Picard, you have here available an automobile for demonstration? A. Yes, sir.

[235] Q. What model automobile is this? A. It is a 1954 Ford convertible.

Q. Do you know who manufactured that top fabric?

A. The Aro Company manufactured it.

Q. Do you know the part number for the fabric? A. Part No. 134.

Q. How close to the sides of the car did these wiper arms push the fabric?

. . . .

[236] A. On the right-hand side the wiper arms held the material approximately against the quarter panel. On the left-hand side the wiper arms were approximately an eighth of an inch away.

Q. Was this eighth of an inch gap, if I may use the term, all along the side of the car? A. No, it was particularly at the front and reduced as you got to the rear corner.

Q. Did you consider this a defect when you saw the car? A. For production purposes we would want the gap to be less than that.

Q. Did you attempt to do anything to the wiper arm on the side of the car where we had the eighth inch gap? A. Yes, I did.

Q. What did you do? A. I bent the wiper arm over.

Q. Was this a major job? A. No.

Q. How long did it take you? A. It can be done in a matter of a couple of minutes.

Q. Is that how long it took you? A. Yes.

. . .

[239] AFTERNOON SESSION

1:45 p.m.

City of Boston Parking Facility
Corner of Congress, Milk and
Federal Streets, Boston, Mass.

Mr. Pollock: Will the reporter note the parties have stipulated that this is an Aro top on the car; that the box from which it came is an Aro box. This is an Aro top, Part No. 134, for a 1952, 1953 and 1954 Ford and/or Mercury convertible automobile. Would you read the stipulation back?

[The reporter complies.]

Mr. Pollock: Do you agree?

Mr. Wolf: Yes.

Q. Mr. Pickard, what kind of automobile do we have here? A. 1954 Ford convertible.

Q. Is this a standard production car? A. Yes, it is.

[240] Mr. Pollock: Will you please hold it up, and I ask the photographer to take a photograph of this wiper arm, this gentleman holding the wiper arm.

[The photographer complies.]

Mr. Pollock: What is your frame number on that plate? This is plate No. 49 and the exhibit will be marked for identification as Plaintiff's Exhibit No. 18.

Q. Now, Mr. Pickard, does this car have a trough in it? A. Yes, it does.

Q. Would you please show the Judge where the trough is?

[241] Q. Are there any fastening means on this drain trough? A. Yes. There is a series of tabs struck out of a separate piece of metal welded onto the bottom of the trough.

Q. These are prongs. A. We call them prongs or tabs.

Q. It has been stipulated this is an Aro top. Does it include an elongated flap extending down? A. Yes.

Q. Is this flap portion in any way attached to the prongs? A. Yes, it is.

Q. Will you show the Judge where?

[243] Q. Now, Mr. Pickard, what side of the car are we on? A. We are on the right-hand side of the car.

Q. Is the wiper arm in place? A. Yes, it is.

Q. Could you estimate how close the fabric is to the belt line of the car on the outside? A. We would consider that to be in contact, essentially.

Q. Could you insert your finger in there? A. No, you cannot.

Q. Can you insert— I have here a paper match book. Can that be inserted? A. No. You can't insert the small end. You might insert a piece of paper.

Q. Can you force it in place? A. No, you can't.

* * *

Q. Is there a cushion in this top? A. No.

* * *

[244] Q. What is disposed between the wiper arm and the belt line of the car on this side of the car? A. Just the fabric itself. Double thickness of fabric.

Q. Just the fabric material?

* * *

Mr. Pollock: I am asking the photographer to take a picture of the right-hand side of the car with the wiper arm in place.

[The photographer complies.]

Mr. Pollock: That is Plate No. 74, which will be the next exhibit number, 21.

Q. Now, Mr. Pickard, I will ask you one more question. Have you done anything to the wiper arm of this car in order to get the fit which appears on the right-hand side? A. No, we haven't disturbed this side at all. This is the way it came.

Q. In production cars have you ever observed a fit as good as this? A. Oh, yes.

Q. Is this the way it is intended to fit? [245] A. This is the way they are intended to be.

* * *

Q. Now I invite your attention to the left side of the car where the wiper arm has been removed. How close would you estimate the fabric is to the inside belt line of the car? A. Approximately $\frac{3}{8}$ of an inch.

* * *

[246] The Court: He said in order to bend it to effect a closer joint.

The Witness: We just take a wrench and give this a twist. If it is open here in the middle, you would do the same thing. You would put more curvature in it. If it is open here at the front you would put your bending iron at the front and bend it outwardly and that would close it up again.

Q. You are speaking of the wiper arm? A. The wiper arm.

Cross Examination by Mr. Wolf

XQ. I would like to ask you to perform one function on it. Can you raise and lower the top with the wiper arm off? A. Yes.

Mr. Pollock: Let the record show Mr. Pickard is getting into the car and is going to start the motor and lower the top.

[The witness lowers the top.]

XQ. Is this the—

Mr. Pollock: The top is now lowered.

XQ. Is this the position the top normally assumes when it is lowered? A. Yes.

XQ. Is there any displacement of the material down in the well because of the absence of the wiper arm? A. Not essentially. It may assume a slightly different shape, but essentially it is the same.

[247] XQ. In substance, then, the absence of this wiper arm has no effect on lowering the top; is that correct? A. That's correct.

XQ. Could you raise the top, please?

The Court: Wait just a minute. I would like to look at the other side. [Examining.] I will state to the untrained eye it is not observable whether the wiper arm is on or off.

Mr. Pollock: When the top is lowered?

The Court: When the top is lowered.

XQ. Before you raise the top, would you indicate, if you can, on this side the position that is normally assumed by the wiper arm in its down position?

* * *

[248] XQ. Could you raise the top, please? A. [Complying.]

XQ. Now you have just raised the top and locked in position. No one has touched the rear quarter in this portion in which the arm has been removed. Would you measure the greatest depth of the—the greatest space you can find between the fabric and the body of the car? A. That is approximately the same. 3/8 of an inch clear here, from the inside of the metal to the outside of the fabric.

Mr. Pollock: Would it be possible to take a photograph at this point?

* * *

Mr. Pollock: That was Frame No. 85 and it will be marked for identification as Plaintiff's Exhibit No. 22.

XQ. For the purpose of the record, how long was that ruler you were holding? A. 5 inches.

XQ. And you were measuring, when that picture was taken at the greatest depth; is that correct? A. That's right.

* * *

[249] XQ. The wiper arm is off. Do you think you could reach your hand in there and remove the fabric from the trough and reach your hand forward towards the door? A. No, you could not.

XQ. You could not do that, even with the wiper arm removed? A. No.

* * *

[253] Mr. Wolf: I would like the photographer to take a picture of the witness pointing to the left fender well.

[The photographer complies.]

The last part, which is relatively brief, appears at pages 67-8:

[220] "263 Q. But would you say that the top fabric itself is a material part of the folding top assembly? A. I would say that the actual fabric itself, without it, it is not a convertible top.

264 Q. That is right. Now, in this particular fabric, Part No. 134, you have a part that comes down and fastens inside the car by being fastened to the top, is that right? A. That is correct.

265 Q. Would you say that that particular section of the fabric which extends inside of the car and fastens to the trough is fairly important in keeping water out of the car? A. Yes.

266 Q. Would you say— A. In keeping it out of the car, but I was going to say—.

267 Q. Keeping it out of the interior of the car? A. Keeping it out of the interior of the car. The fastening to the trough is very important, yes.

268 Q. Am I correct in stating that one of the important improvements in folding tops of the type used on the 1952, 1953, and 1954 Fords, by way of example, is the fact that the fabric comes down into the car and is fastened on the [221] inside of the car so no water can get on the interior of the car itself and any water which does seep down past the fabric goes into the trough? A. That is correct.

269 Q. Does the idea of having a section of the fabric coming down inside the car and actually fastening on part of the car, for instance, adjacent to the trough, is that the important thing? A. That is correct."

Redirect Examination by Mr. Pollock

Q. I have just a very few questions, Mr. Booth. Yesterday, in your cross-examination you were asked a question and gave an answer which appears at page 148 of the transcript. I should like to read the question and answer:

"Q. From your examination of the particular top that you saw,—"

and I might note we were speaking of Top 134 on a Ford automobile—

"—would you conclude that no effort was made to provide in this particular top a seal in the sense of closing the distance between the wiper arm and the body line? A. Well, I saw no evidence of any effort to obtain a seal."

Would you please explain what you meant by that answer?

[222] A. I understood the question to mean was there anything done other than by way of addition I should say to the structure of the top fabric or car itself to press the fabric tightly against the belt line. For example, by addition of pads or perhaps by bending the wiper arms. I saw no evidence that any pads had been added or any bending of the wiper arm had occurred, or that anything had been done other than merely installing the top on the car.

Q. In this case, however, was there a seal? A. Yes.

* * *

[224] Q. Do you consider the word "seal" to be an absolute term? A. No. Very few terms are absolute. When you are speaking, for example, of sealing a delicate instrument where hermetic sealing is required, you are talking about exclusion of all gases, moisture, everything. When you are talking about sealing against access of water a much less effective seal would be required because such a seal might well pass gases or air but exclude water. There could be all sorts of degrees of sealing.

Q. Do you consider that the different terms used in the

Mr. Pollock: While we are in this trunk, will you please lift up what you have been calling the recess well cover [254] with your left hand and point with your right hand to where the luggage would go?

Mr. Wolf: That was picture No. 87, which will be Plaintiff's Exhibit No. 24 for Identification.

Mr. Pollock: Don't lift it up so high we can't see the recess well.

The Witness: This is made so we can raise it that high.

Mr. Pollock: Could you take it from back here?

[The photographer takes a picture.]

Mr. Pollock: That is No. 88, which will be Plaintiff's Exhibit No. 25 for Identification.

* * *

[257] *Redirect Examination by Mr. Pollock.*

Q. I would like to ask one question on redirect before you do anything else. Do I understand your testimony correctly—did you say if the trough were to have too much water in it, it might spill over the trough and contact water damageable parts of the car? A. Yes, it would.

Q. Where did you say these water damageable parts were? A. The linings and the inside top materials attached directly to the main trough.

[258] Q. Did you also say that the water could spill into the luggage compartment? A. Yes, from there and from over in here and into the luggage compartment [indicating]. We have had that happen.

* * *

Re-cross-examination by Mr. Wolf

XQ. This arm is bent out of shape, is that correct? A. That arm is approximately the correct shape as it was.

* * *

XQ. And it was quite a job? It is quite a job, in so far as you had to apply quite a bit of force to bend it out? A. No, it is not. You can bend that very readily.

XQ. Using a lot of leverage? A. No, just using a wrench.

[259] XQ. Using substantial leverage? A. I can bend it even like this [illustrating].

XQ. There is no way of adjusting this other than by bending it the way you did? A. Yes. These holes are made for adjustment.

Mr. Pollock: You are speaking of the holes in the bracket at the edge?

The Witness: The holes in the bracket are there so it can be adjusted in or out.

* * *

[261] *Further Redirect Examination by Mr. Pollock*

* * *

Q. Mr. Pickard, there was some discussion relating to the bending of the wiping arm. A. Yes.

Q. How difficult a job is this? A. That is a very simple job.

Q. Had you ever done or seen such a procedure done before? A. Yes. That is a customary operation. In the building of [262] an engineering car we have to do these things to accommodate the handmade bodies.

Q. If a car is brought into the shop with a gap in it between the fabric and belt line would anything be done about this gap? A. Yes.

Q. In normal practice? A. Yes.

Q. How would you correct for the gap? A. We would correct it by either moving the bracket over at the rear by means of those elongated holes, or if that was not enough we would bend the bracket where required.

Q. You are speaking of the bracket on the wiper arm? A. The wiper arm, yes.

* * *

Q. For the fabric we did observe has it been your experience the fabric tends to chafe in the area of the rear quarter? A. No, it does not.

Q. Have you ever seen such chafing? A. I have never seen it.

Q. Adjacent the rear quarter? A. No.

Q. I believe we have heard testimony to the effect that there [263] is a scissors action because of the wiper arm and body line. Have you ever observed such a scissors action? A. No, I have not.

Q. How many of these cars have you seen? A. Well, we have built a good many of them in our experimental work for test purposes, and also it is necessary for my men and myself occasionally to follow production cars. If there was that trouble we would be involved in it.

Q. Have you ever encountered any complaints to the effect that the fabric chafes in the area of the wiper arm? A. Never.

[264] Q. Would you explain what the typical or usual rear quarter construction was for the General Motors convertible automobiles prior to the year 1950? A. Prior to 1950 General Motors used a channel attached to the belt rail on the quarter and a reinforced section which you might call a cuff on the bottom of the quarter fabric. That cuff engaged the channel, making a locking arrangement.

Q. Did the General Motors Corporation ever use any other construction adjacent the rear quarter? A. Yes. They have used fasteners.

Q. What kind of fasteners? A. We usually call them Durable Dot made by Carr Fastener Company.

Q. The typical rear quarter construction for Ford automobiles prior to 1952? A. They have used a fastener also.

Q. What kind of fastener? A. The Durable Dot fastener.

Q. Did the industry recognize any disadvantages in these types of fastening means? A. We did, definitely.

Q. Could you elaborate on what the disadvantages were? A. One of the main disadvantages was that the owner had

to engage or disengage the fasteners at the belt rail when lowering or raising the top. The second was that in some cases, if he [265] neglected to disengage the fasteners at the belt, when he lowered the top, and the fastener stuck, thy pulled right through the top material. We have had cases of that kind. Another very definite disadvantage was the fact that the material was attached with these fasteners on the belt, and there would be a shrinkage of the material to such an extent that after the top had been used for some time it was very difficult and in some cases impossible to reattach the fasteners, after the top had been down in the well for a given length of time.

Another disadvantage was that the top was opened by means of these fasteners, and it wasn't what you might call thief-proof, or at least it left the impression on the owner that it would be very easy for a thief to get in and steal articles on the rear seat cushion or even open the door.

* * *

Q. Did these constructions in any way solve any of the disadvantages which you have just enumerated? [266]
A. Yes.

Q. Would you please elaborate on how they solved these several disadvantages? First, the queston of the fastening.
A. The question of the fastening was a very definite improvement because it was not necessary to fasten or unfasten the fabric. The top was what we call an automatic top. It could be raised and lowered without any thought of fastening or unfastening any fasteners at any point.

Q. Now the question of shrinkage? A. Yes. The top being more permanently attached at the belt and attached at more points, it provided a better arrangement for securing the material at the belt, and in that area, so that the shrinkage could not occur.

Q. How about the question of tearing of the fabric?

A. Well, there would be tearing at the fasteners because there was no fastener to pull out or to stick.

Q. Wasn't it possible for the fabric itself to tear loose from the fasteners, from the permanent fasteners? A. No, because the fastening was at what we call a hinge point, a natural po nt at which, when the top is lowered the fabric is loosened and never tightened more than in the up position.

Q. How about the question of locking the car? A. The locking of the car was quite a sales feature. The salesman could tell the customer that now his top was securely anchored, and that while thieves could cut the fabric and could [267] get in by other means, yet it hindered them from entering the car because of the material being securely anchored.

Q. When the 1952 Ford construction, the Ford convertible automobile, came out did they include a cushion in the fabric material? A. Yes.

Q. Was there such a cushion in the 1953 Ford convertible automobiles? A. Yes.

Q. Was there a cushion in the 1954 Ford convertible automobiles? A. No, there was not.

Q. Could you please tell us what happened to the cushion in the 1954 Ford convertible automobiles? A. The cushion was discontinued in the 1954.

Q. Are you speaking of original equipment? A. Yes.

Q. Could you please tell us why the cushion was discontinued in the 1954 Fords? A. Well, the cushion was originally put in because it was considered to take up body variations, but after its being in use for some time we found that by experimentation and development the cushion was not an essential part of the top and that the top could function fully as well without the cushion, and it reduced the cost.

Q. What is the function of the wiper arms in these vari-

ous [268] constructions that we have been speaking of? A. The function of the wiper arm is to hold the material against the belt rail.

Q. Does your statement apply when the top has a cushion in it? A. Yes.

Q. Does your statement apply when the top has no cushion in it? A. Yes.

What is the function of the trough in these structures we have been discussing? A. The function of the trough was to carry off any water that might seep in between the fabric and belt rail.

Q. How was the structure adopted on the 1950 General Motors car received by the industry? A. It was received very enthusiastically.

Q. Can you elaborate on that? A. Well, for years the convertible top, young fellows especially have wanted to get a top which was considered to be completely automatic. This was the first completely automatic top.

* * *

[269] Q. You were speaking of bending the wiper arm previously. Could such a procedure be followed on cars other than the 1954 Ford automobile? A. Yes.

Q. Could it be done on the 1953 Ford convertible automobile? A. Yes.

Q. On the 1952 Ford convertible automobile? A. Yes.

Q. Are you familiar enough with General Motors convertible automobiles to comment on whether or not the wiper arm can be bent? A. Yes, they could be bent.

Q. Is this a major job? A. No, it is not.

Q. Can it be done by trim shops? A. Yes.

* * *

[270] Q. From your experience in the replacement top field can you tell us whether or not a replacement top for one car and model will fit another car and model? A. No, it will not.

Q. Can you tell us why that is? A. Because of the size and shape of the body shell.

Q. Could a replacement top for a Ford automobile be used on a General Motors car? A. No, it could not.

• • •

Q. Do used car dealers ever use replacement top fabrics? A. Yes.

• • •

[272] A. The used car dealer, especially would rework the tops or replace the covering on the tops if his cars were not moving; that is to say, if they were not selling fast.

Q. Then they do replace the top? A. Yes, they would more than if they were moving fast. If they are moving fast they don't see the need of spending money on the car.

Q. Did you ever do work for used car dealers when you owned your own trim shop? A. Yes, I did.

• • •

[273] *Re-Cross-examination by Mr. Wolf*

XQ. Mr. Pickard, are the 1952, 1953 and 1954 Ford convertibles identical in so far as top construction is concerned? A. Yes, in general construction.

XQ. Isn't there some difference in the space between the wiper arm and body line in the 1954 Ford as compared with the 1952 and 1953 Ford? A. Space?

XQ. Yes, space. A. Do you mean at the quarter?

XQ. Between the wiper arm and body of the car. A. There shouldn't be any essential difference in the space between the wiper arm and the body.

XQ. Didn't you give an affidavit at one time to that effect, that there was a difference? A. Possibly I don't understand your question.

XQ. Do you recall the affidavit you submitted to this Court? A. Are you saying the bare body or the finished job?

XQ. Well, I haven't said either, but perhaps you could

explain it to me. A. Well, when we had a cushion on the quarter trim, it was necessary engineering-wise to space the wiper arm accordingly. When the cushion was taken off we moved the wiper arm out the distance of the cushion.

XQ. I see. In other words, there was a difference between [274] the production model 1952, 1953 on the one hand as compared to the 1954? A. The wiper arm was moved out the amount of the cushion.

XQ. But other than that the construction was identical to the 1954? A. That is right.

XQ. Would you estimate what this greater distance was between the wiper arm and the body? A. I don't know the exact dimensions, but roughly a quarter of an inch.

XQ. The Ford cushion was only a quarter of an inch thick? A. Compressed.

XQ. Compressed. Therefore, our examination downstairs of this 1954 model car would have revealed a greater space between the fabric and body line if it had been a 1953 car with an Aro top, is that correct? A. Yes.

XQ. What would you estimate the space to be if we used a 1953 or 1952 Ford car? A. Roughly a quarter inch more.

* * * * *

XQ. The car I saw downstairs, you had testified that there was [275] an eighth of an inch on one side and nothing on the other? A. Well, that is just a matter of adjusting the arm.

* * *

XQ. Do you think you could have gotten a Ford top with a cushion on to this particular model we saw downstairs if it were properly adjusted? A. Yes.

XQ. Wouldn't the fabric have jammed and caused some difficulty? [276] A. You could adjust the wiping arms.

* * * *

XQ. You said that the Ford Motor Company changed between 1952, or I presume you will agree that the Ford

Motor Company changed their models from 1952 to 1953 to eliminate the cushion? Is that correct? You have indicated that.

Mr. Pollock: 1952?

XQ. 1953 to 1954? A. Yes.

XQ. You further indicated the purpose was to save money and eliminate an unnecessary cushion, is that correct? A. That is correct.

XQ. I presume from this you mean that now you had found that by moving the wiper arm in close and eliminating the cushion completely you were still able to effect a seal in this area and prevent water from coming in, is that correct? A. That is correct.

XQ. In this particular construction, therefore, in 1954 you had a wiper arm that actually pressed the fabric up against the body line, and still did? A. That is correct.

XQ. You say you are familiar with the Aro 134 top. Will this [277] Aro 134 top fit the 1952, 1953 and 1954 cars equally as well? A. I should think it would.

XQ. Would you agree with me if I hypothetically had one of these 134 tops in a box and I sold it to someone, there would be no way of me necessarily knowing how this was to be used, on which particular car it was to be used? A. Yes.

* * *

XQ. With reference to a 1952 Ford having an original top, if you adjusted the wiper arm so that the wiper arm was close to the body line and in the same relative position as the 1954 Ford convertible wiper arm, what effect would you have? A. Well, it should be the same condition as the 1954.

XQ. I say, you had an original 1952 top on. A. Yes.

XQ. What might happen? A. The original 1952—you said you moved the other arm out?

XQ. Move the arm out toward the body line, in the same relative position as in the 1954 top. A. Yes.

XQ. What might happen if we did that experimentally? [278] A. Nothing.

• • •

A. With the cushion you would have too much pressure on the cushion.

• • •

XQ. Would you agree with me then, if we put an Aro top on a 1952 car water would pass freely down the side of the fabric, between the fabric and the body line of the car, that there is a space sufficient to allow water to pass freely? A. Would you say that again?

The Court: And the assumption is you do not move the wiper arm.

XQ. Upon the assumption the wiper arm is as it was originally on the car? A. No cushion?

XQ. No cushion. You are using an Aro 134 top on a 1952 model car. A. But you don't change the arms?

XQ. No. A. No adjustment? You would have likely a surplus of water that would enter the drain well.

[279] XQ. Presumably a substantial portion of the water running down the fabric would roll right past the body line into the trough, is that correct? A. That's correct.

XQ. While we were outside we looked at this wiper arm. Would it be fair to say from your examination of the wiper arm in position and out of position, with the top raised and lowered, that the sole purpose of the wiper arm was to create the seal? A. It is to reduce the opening guarding the water entrance, and also it is an appearance item. From a convertible top standpoint and styling we wouldn't accept the top with a hole in it, as you saw it there on the right-hand side or the left-hand side.

XQ. About 3/8ths of an inch? A. Yes. That would not pass inspection, just from an appearance standpoint, even

though the water could all be carried away. From an appearance standpoint it would not pass.

XQ. This is strictly from the point of view of Ford Motor Company production engineering and quality control? A. That is correct.

The Court: Do you mean by that some people wouldn't care what their car looked like, and he is not talking about them, or what do you mean?

Mr. Wolf: Yes, your Honor, precisely. As a matter of fact, I might follow this thing through one step further.

[280] The Witness: We find that the people who buy these cars are very fussy and do not want holes in them.

XQ. Are you familiar with the replacement top field? A. Yes, somewhat.

XQ: Has it ever come to your attention that replacement top trimmers do not bother to put on these wiper arms when they happen to be missing? A. Well, my experience is that no authorized convertible top man would do that. Now that is what we term a back alley trimmer, and of course they do anything.

* * *

[282] XQ. Did the 1953 Chevrolet and Pontiac automobiles have wiper arms? A. Yes, they did.

XQ. Did the 1954 Chevrolet and Pontiac have wiper arms? A. No, they did not.

XQ. What was the difference in the construction of the convertible top arrangement in those successive years? A. Well, they used a different method of sealing. Instead of having the cushion, they had the channel on it.

XQ. Let's talk about the frame first. Was the frame identical? A. Essentially it was identical.

XQ. Are you aware of the fact that the identical fabric top would fit both cars? A. Yes.

XQ. Are you aware of the fact that the Aro top part

number is the [283] same for both years? A. It could well be.

XQ. Are you further aware that the—pardon me—are you aware that the Aro does not sell a different model number for each of those different cars? Maybe you have examined some of this Aro top construction, I presume? A. Yes.

XQ. It would then be a fair statement to say the identical top can be used with or without a wiper arm? A. That is correct.

XQ. And it is perfectly accepted and approved as far as the installation is according to accepted techniques? A. On those particular models.

XQ. Yet the wiper arm isn't on one of them and is on the other? A. That's right.

XQ. Wouldn't you conclude from your examination of all these cars that have wiper arms and do not have wiper arms that this question of unwarranted access might, to some extent, at least, be a question of sales puffing of the patent application? A. No. It was also a matter of appearance.

XQ. I am talking about unwarranted access alone. A. Unwarranted access, it was a sales point, yes.

* * *

[287] The Court: I assume you have in mind the windows of the car might be open so that wind would come from the bottom?

The Witness: That's right. Do you see how these tops baloon? Like a drum on the top. They baloon four or five inches and it would blow that out so fast you wouldn't know what happened, if it wasn't anchored.

XQ. Have you ever had occasion to hear of replacement top manufacturers who don't bother to secure this fabric? A. I have never heard of it, no.

XQ. Have you ever seen a car that did not have the fabric secured? A. No, I never have.

XQ. I understand that the Ford top has three successive layers in the 1954 model in the flap area; is that correct? A. That might be considered as three. It has a folded over section for reinforcement.

XQ. Is that all it is for, reinforcement purposes? [288] A. That's all.

XQ. Where is that folded over section? A. Adjacent to the belt rail.

XQ. Between the belt rail and the wiper arm? A. That's right.

XQ. So in this model car we saw, that would provide somewhat of an additional seal; is that right? A. That's right.

• • •

[289] XQ. Can you tell me on the car what the tolerances are, in the Ford Motor Company productions, in the area of convertible tops? What sort of tolerances do they try to work toward? A. I would have to know specifically where you are referring to these tolerances, because we have different tolerances for different things.

• • •

[290] XQ. Not the wiper arm per se, but the location of the wiper arm. A. I couldn't give you the exact tolerances. It is usually given on the drawing and—but the wiper arm likely would not be in—at the bracket at the rear, would likely not be more than an eighth of an inch mislocated.

• • •

XQ. You spoke before about applying a water test to this particular model car we saw and you said you applied it to the right side. Did you apply any water to the left side at any time before you altered the wiper arm? A. No, we did not.

XQ. Do you know what the results would have been had

you done that? A. Well, only by assumption from other cars that we have water-tested.

XQ. What assumption would you have made? [291] A. Well, the way that we saw the job originally, it was roughly 1/8 of an inch gap there between the fabric and the body panel. An eighth of an inch gap we would say would be about the major tolerance and you would likely be able to shed all the water off, and the rest of it that went in would likely be carried off by the trough.

XQ. So anything more than an eighth of an inch you would say would probably substantially all go down into the trough; is that right? A. That is true. However, you have got to consider the different types of rains, whether the car is standing in it, rain beating in the side or the rain coming straight down or it is an all-day rain.

* * *

The Witness: Yes, I understood the question but I could not say all the water would go down in the trough even if it was 3/8 of an inch, because if you had rain coming from a certain direction, the top may be able to shed it and may be able to take care of it, depending on the extent of the water—

The Court: I misunderstood the purport of your answer.

XQ. In other words, what you are saying is if there is a deluge, [292] and perhaps a heavy wall of water— A. That's right.

XQ. —and the wall of water may be has a depth of 1/4 inch, it is perfectly obvious not all of it will be able to force its way down between that gap? A. That's right.

XQ. But if the wall of water is 1/16 of an inch high, or if it is discontinuous, as in the case of raindrops, or a stream which might have a chance to spread out, it will possibly go between the fabric and the body of the car; is that right? A. That's right.

XQ. So to some extent it is a function of how much water you are going to pour down? A. Yes.

XQ. And if you take a bucket and pour it all at once it is not going to have a chance to get in? A. That's right, or the amount that gets in may not be able to get out readily.

XQ. Under ordinary circumstances, from your testimony I understand you to say that if the space is greater than 1/8 of an inch you find it is not satisfactory? A. That's right.

[293] A. May I say we have found in our tests that to make a satisfactory car, that we do not want a car to go off the end of our line with over an eighth of an inch opening in there, and that could take care of those rains, as you get them, and also snow, which is a very important part.

XQ. It would take care of wind and other weather conditions? A. Yes.

[294] XQ. Now did you ever say you never saw the condition of chafing? A. No.

XQ. On any kind of car? A. Not at the belt.

XQ. At the belt line? A. That's right.

[302] *Redirect Examination by Mr. Pollock*

Q. Mr. Pickard, you said that if a 1952 Ford were to have an Arq top put on it with no cushion and with no adjustment of the wiper arms there might be a large enough gap between the fabric and belt line for a substantial amount of water to pass to the trough, A. That's correct.

Q. Would you consider that this would be a proper installation? A. No, I would not.

Q. Would you consider that the wiper arm is performing its intended function? A. No.

Q. How would you correct this, if you could? A. I would correct it by adjusting the wiper arm.

Q. Again, would this be a major job? A. It would be a very small job.

* * *

[303] Q. I believe you also stated that if there was a gap any greater than one-eighth inch on a Ford production convertible automobile that would not pass inspection. A. That's right.

Q. That would not be within tolerance? A. That's right.

Q. However, would you pass a car with a one-eighth inch gap? A. Yes.

* * *

Q. Would you consider a car with a one-eighth inch gap still has a seal at the belt line? [304] A. Yes.

* * *

[305] Q. Did you say that the 1954 Pontiac had a bar inside of it? A. That's right.

Q. Have you actually seen this bar? A. Yes.

* * *

Q. If this bar were removed, would you have a larger hole at the belt line? A. You would have to anchor it somewhere. The bar is simply a method of attaching it.

* * *

[308] EDWIN C. PICKARD, Resumed

Examination by the Court

Q. In connection with your work in the automobile industry do you have occasion to be acquainted with the relative prices of different models of cars? A. No, I do not.

* * *

[309] Q. Is there any general principle in the industry as to how long a convertible top may normally be expected to give good wear and good appearance? A. Well, ordi-

narily they figure the top should be satisfactory for a year. But in our Service Department, if they have a situation that they feel is warranted, in other words, that the customer has carefully taken care of his job and yet the car has not given satisfactory service, they will take care of a customer. And in that respect, concerning a convertible top, [310] they would send the top back to the Engineering Department through the Service Department. We have a Service Engineering Department. And eventually it reaches the specific engineer in charge of that section and on the convertible top section that would be my department.

[311] The Court: I didn't mean so much how long a time you would replace a top free; I wondered whether there was any general expectation in the industry as to when a customer would expect to receive the full length of service that a convertible top will give him.

The Witness: No, your Honor. That would depend largely on the conditions in which the car is placed. In other words, if you had your car stored in the open and stored near a place where, perhaps, you might have damaging fumes, for instance, that might damage your top in a very short length of time. Whereas, you may have a car and keep it in a garage at night. When you drive downtown to your work, wherever it might be, you put it in an enclosed garage, protected, this top might last a lot longer than another one which is exposed to the elements.

The Court: Even under those conditions, is it fair to say the top will presumably not last as long as the rest of the car?

The Witness: That is right.

The Court: Could you say as to, under those conditions, how many tops a man might normally expect he would

buy if he kept the car himself until it was pretty well run out?

The Witness: I would say if you are a particular owner and you want to keep the car in good shape, you would really want to replace the car—the top, in roughly three years. If it was particularly protected and cared for under good conditions, [312] it might last four or five years. I would say normally—

The Court: Conversely, if I had no garage, stored it outdoors, it would be less than three years?

The Witness: It might be less than three years.

The Court: Without any legitimate complaint on my part against the manufacturer?

The Witness: That's right.

* * *

[332] Mr. Wolf: In so far as the question of infringement is concerned, I believe the remarks which I have just made cover a good portion of that position that we now have, that we don't infringe, and that we don't provide a seal we don't intend to provide a seal and we allow as much water as possible to pass between the body [333] of the car and the fabric, and we have no intention whatsoever of attempting to close off the water coming in and that the function of the wiper arm in that instance is, as far as we are concerned—

The Court: Do you mean that, that you try to let the water get in?

Mr. Wolf: We don't try, but we don't care. As far as we are concerned, it makes no difference because we found that the trough is sufficiently big to carry off the water that does get in.

* * *

[341] HAROLD SHAPIRO, Recalled

Direct Examination by Mr. Wolf

* * *

Q. Mr. Shapiro, what kind of car did you bring with you today? A. 1953 Ford convertible.

Q. Where did you get it? A. We borrowed it from an owner in Natick.

Q. When did you first see this car? A. The night before last.

Q. What kind of top has the car on it? A. An Aro top. I would say it was put on in August of 1956.

* * *

Q. Was this particular car which we are going to look at a [342] typical car or not a typical car of the cars you have seen in the 1953 Fords? A. I would say it is very typical.

Q. How would you compare it with the 1952 Ford? A. The body style is identical, the framework.

Q. What part number do you use on the top? A. 134.

Q. What part number do you use on the 1952 top? A. 134.

Q. And the 1954? A. 134.

* * *

[343] *Cross-examination by Mr. Pollock*

* * *

[345] City of Boston Parking Facility
Corner of Congress, Milk and
Federal Streets, Boston, Mass.

XQ. Is this the car to which you referred? A. Yes, it is.

XQ. You saw the 1954 Ford yesterday. I believe that this is the same car in position beside it? A. Yes, it is.

XQ. Can you tell me whether or not the folding bow structures are identical? A. I would say they are identical.

XQ. Will you also examine the inside and tell me whether

or not the covering material in the well is also identical with that car? A. Outside of color, it is identical.

XQ. Can you please tell me if you notice or if you know of any difference at all in the construction, as to any bow mechanisms, wiper arm and fabric tops? A. It is identical.

• • •

[346] XQ. I am going to hand you the same ruler Mr. Pickard used yesterday, and I would like you to measure the widest space you note between the fabric and the body line. What is the distance? A. [Examining] ½ inch. About ⅜ of an inch.

XQ. That is from the middle. What is it in the front end? A. The front end I would say ⅛ of an inch.

XQ. And at the rear end? [347] A. ⅜ of an inch.

The Court: Could I borrow that ruler a moment?

[The witness hands the Court a ruler.]

The Court: [examining] Counsel is welcome to measure it. I make it almost within a hair to ½ inch on the right-hand side of the car at the maximum space.

• • •

XQ. This particular car we are looking at now, could you tell me what type of fabric top was originally installed on this type and model car? A. You mean whether it was cloth?

XQ. No. Will you please describe the fabric in and around the belt line? A. The original top that was installed on this car had a sponge rubber cushion stitched on the inner side of the top material adjacent to the body and the wiper arm.

• • •

[348] Mr. Wolf: I would like the reporter to take a picture of the side that the Judge saw. Would you measure, at the same time, showing the greatest depth? I would like you to take a picture substantially from the same

angle that you took yesterday showing the measurement at this point.

[The photographer takes a photograph.]

• • • •

Mr. Wolf: Yes. C for Identification.

• • •

[349] XQ. Would you please indicate the nature of the test you normally conduct in determining watertightness of the car? A. We would say a car is watertight when 90 per cent of the water is dispersed on the exterior of the car. That was our original intention when we had our shingle under 134. Consequently we have made our 134 without a shingle or cushion and found that even by directing the water inside the car no effect to the watertightness or damage to the interior was shown.

• • •

[350] XQ. In using this particular test, on applying water with a sponge, have you found it satisfactory and reliable? A. Yes.

• • •

Mr. Wolf: Would you take a picture of this, showing the water draining down? [The photographer complies.]

• • •

Mr. Wolf: The picture just taken is Frame 62.

XQ. In applying the water just at that point, did you notice [351] whether or not more water went inside or outside? A. I would say all the water went inside the car.

XQ. I noticed there is some water on the body line here.

The Court: It went off the witness's wrist.

• • •

Mr. Pollock: We are speaking of the adjustment that is provided in the Ford cars. They have a long slot. The

wiper arm is pushed off in an inner direction as far as it will go.

XQ. [By Mr. Pollock] Could you measure the area now with the wiper arm pushed over as adjusted? A. I am pushing the adjustment of the wiper arm over to the fullest. I don't want to push the wiper arm but the bracket. I am pushing where the bolts are.

[352] XQ. At the forward end of the wiper arm?

The Court: The forward end of the wiper arm is just about 1/8th of an inch [after measuring].

* * *

[353] Mr. Wolf: Would the court reporter note that the wiper arm is being held in as far as it can go by Mr. Pickard while Mr. Shapiro is now applying a quantity of water by means of a sponge?

Mr. Pickard: There is interference in behind this bracket. It can't be pushed over.

The Witness: Just where the bolts are, Mr. Pickard. Hold your finger in there the way I did when the Court measured it.

Mr. Pickard: There is stuff in behind here. Let's get that stuff out of there.

Mr. Wolf: Mr. Pickard says there is a retaining member which affects this.

Mr. Pickard: It has been half taken off, and there is fabric in here.

* * *

Mr. Wolf: Is it substantially correct, Mr. Pickard?

Mr. Pickard: No, it is not. This bracket, do you [354] see this? This is in behind here—it is all bunched up in behind so you can't push the bracket out.

The Witness: There are two elongated holes. The metal, it is up to the fullest on the elongation right now.

Mr. Pickard: No, it isn't.

The Witness: That is the way it came from the Ford Motor Company.

Mr. Pickard: The other side isn't either.

The Witness: Nobody ever adjusted that. I'm positive.

Mr. Pollock: Somebody must have.

The Witness: They don't take the wiper arms off.

Mr. Wolf: Do your best, Mr. Pickard.

Mr. Pickard: It's only half-way. Do you see all this stuff that is bunched up?

Redirect Examination by Mr. Wolf

* * *

[356] Q. When you just had the wiper arm pushed out as far as it would go, is that a normal position for this particular type of car? A. I don't know what the normal position is. To my knowledge nobody ever adjusted it. They just take it the way it comes from the plant. On all the ones we have seen there has been at least 3/8ths of an inch space between the belt line and the wiper arm.

Q. Would you complete removing the wiper arm? A. Yes.

* * *

[357] Q. Will you measure that again, please?

Mr. Pollock: Without pushing it.

Q. [Continuing] Without pushing it. A. [Complying] Less than ½ inch. About 7/16.

Q. At its deepest point? A. At its deepest point.

[358] Q. That is with the wiper arm removed? A. Yes.

The Court: This is on the right-hand side where it previously was something less than that?

Mr. Pollock: It was previously ¼ of an inch.

The Court: And about 3/8 before it was adjusted at all.

* * *

Q. And satisfactorily. Now can you release the fabric from the prongs at the lower end? A. [Complying].

Q. Will this top operate, raise and lower, and the fabric come [359] back in the same position as it is now with that fabric released? A. Yes.

Q. Will you try it, please?

* * *

Q. Will you please lower and raise the top? First lower it. A. [Complying.]

* * *

[360] Q. All right. Now raise it, please. Notice the fabric is torn away a bit there. A. [Complying.]

Q. It is now locked in place. Without touching the material will you please indicate whether or not that, in your opinion, is, in substance, in the same position as before lowering? A. I would say in substance it is exactly the same.

Mr. Wolf: I would like to have a picture taken of this, please. Will you please indicate the depth with the greatest penetration, with the ruler?

[The photographer takes a photograph.]

Mr. Wolf: That is 119, which will be Exhibif D. Could you take one further picture from an angle looking inside to show the fabric unattached on the inside?

[The photographer complies.]

Mr. Wolf: That was pitcure frame 120, which will be Exhibit E.

[361] Q. [By Mr. Wolf] Mr. Shapiro, could you take the lower end of this fabric, which you have now unattached, and wrap it around that wiper arm and secure it in some fashion to the wiper arm? A. Yes.

Q. I have here a paper clip. Perhaps this will help hold it in place [handing paper clip to the witness].

Mr. Wolf: I would like to have a picture of this taken

from the inside, showing the fabric secured to the wiper arm. [The photographer complies.] That is Frame 118.

Q. Now would you indicate what spacing you see when the fabric is in that position? A. I would say a quarter of an inch.

Q. Maximum? A. 5/16ths.

Q. Would you raise and lower the top? A. Yes. [The witness lowers the convertible top.]

Q. Would you raise it now please? A. Yes. [The witness raises the convertible top.]

* * *

[363] Q. Mr. Shapiro, would you please examine the paper clip which we used to secure the flap, and indicate whether or not it is substantially or not substantially in the same place? A. I would say it is in the same position as before we lowered it.

Mr. Wolf: Would you take a picture please? [The photographer complies.] That is Frame No. 115. I would like another picture taken of this side, from this side, showing the fabric top in its raised position, with the fabric attached to the wiper arm. [The photographer complies.] That is Frame No. 63.

* * *

[364] Q. I believe you mentioned, during your direct testimony with Mr. Pollock, that it was possible to secure this fabric to the outside of the car and I think you indicated it had been done occasionally. Can you demonstrate that for us right now? A. Yes, I could. [Complying.] Two fasteners can be installed.

Q. Can you install them right here? Will it take long? A. No, it will only take a minute.

Q. All right; will you install them? A. [Complying.] Of course the window channeling can be put down. When the top is lowered these can be released and the top will go down in the regular fashion.

Q. Do you know whether or not this is done with your tops? A. I have seen it done. It certainly simplifies it for a trimmer if he is pressed for price or if anything is wrong inside on the car, or the prongs are broken off. This would speed it up. A full installation is two hours. He can speed it up a half an hour, or 25 per cent. It would be 1000 per cent more rainproof in this fashion.

Q. You are speaking of the top with the snap fasteners on? A. Yes. This is made similar to your Honor's 1950 Plymouth with the two snaps.

* * *

[365] Mr. Wolf: I would like to have a picture taken from this angle over here.

[The photographer complies.]

* * *

Mr. Wolf: That was Frame No. 64, for Identification.

* * *

[366] *Recross Examination by Mr. Pollock*

XQ. How long did it take you to convert from the top structure with the long flap inside the car to one with snap fasteners on the outside of the car? A. You mean on this installation?

XQ. On this particular installation this morning. A. Oh, I would say about 2 minutes.

* * *

[367] *Redirect Examination by Mr. Wolf*

Q. Mr. Shapiro, in the demonstrations that we have just conducted, we demonstrated the car in connection with the 1953 Ford using an Aro top. One of the demonstrations included releasing the fabric from the fastening to the body of the car and raising and lowering the top. Will you please tell me what would happen if you had had an original top on there? A. I think it would act in the same manner, exactly.

Q. Would you—if you had an original top with a cushion,

what [368] space might you find, if any, between the wiper arm and the body line? A. Probably none.

• • •

[371] Q. I would like to keep the record straight by offering—I would like you to first identify these two pieces of fabric which we have marked for identification as Defendants' Exhibits A and B. Will you identify them, please?

• • •

[372] A. These were taken off a 1953 Ford in our own trim department and saved for this demonstration.

Q. Did you see it taken off? A. Yes, I did.

Mr. Wolf: I offer this as Defendants' Exhibits A and B, your Honor.

• • • • •

[374] A. A top possibly could chafe on one of the bows on the upper structure, say at the curvature; if it started to show any signs of wear, in all probability he would go back to his dealer, who in turn would try and make some kind of adjustment so the bows folded more properly. Down in this section here, where it is partially submerged in the body line and partially above the body line, and especially at the front, there is absolutely no adjustments on this wiper arm. I will go along with Mr. Pickard's statement that there is an adjustment at the rear.

• • •

[377] Q. You also indicated that you designed your top independently of the original type of manufacture. In so designing yours, do you make any changes or do you try to follow as closely as possible the original models? A. No. The only changes we make are leaving out what we feel is unnecessary, without affecting the workings of the top. In other words, the weatherproofing, and so forth. We try to bring down our cost as low as possible and still turn out a quality product.

Q. What changes might you make or do you make? A. The only thing we follow on the original top is, like I [378] said in my previous testimony, when a Ford goes down the street we like to have it look like a Ford and if it is a Chevrolet we like to have it look like a Chevrolet and not like a Chrysler. That is only in relation to the size of the opening in the rear, to accommodate the curtain, and approximately the location or style of stitching that is used.

Q. What other variations can you have? A. The valance section, which is the rear section. The Chevrolet runs their seams in on an angle. Ford runs their seams straight. I have seen custom-made tops where they have angled in a Ford seam, and to me anyway it looked as if it were a Chevrolet going down the street if you looked just at the top.

Q. Yesterday Mr. Pollock asked you, or the day before he asked you, the number of models that you make for cars which embody this wiper arm, of which apparently the plaintiffs are complaining. I believe you said something like seven? A. That is right.

Q. I further believe you indicated there are approximately 140 different models you offer for sale. Could you tell me with that background what percentage of the 140 models volume-wise are constituted by the seven models of which the plaintiffs complain? A. I would say today about 75 or 80 per cent.

[379] Q. Of your total business? A. Yes.

Q. Could you please tell us what type of competition you have in this particular field? A. Well, we have several competitors, like all businesses. We compete with each individual trim shop. You could call that 15,000 competitors. We have top manufacturers. We have approximately seven or eight so far.

Q. Do you know the names of any of these? A. Yes,

I do. One is Rayco of Paterson. We have Crown Auto Top of Columbus. We have Atlas International, Chicago. B. T. Crump, Richmond. We have Acme Headling Company, San Francisco. I believe it is San Francisco. It is California, anyway.

We have Trio in Brooklyn, New York. I don't know whether Brooklyn Fabrics and Trio are the same company. There is Nu-Top in New York.

Q. Do these companies and Aro Top Sales sell locally or how do they distribute their sales, as far as you know? A. They distribute in about the same that the rest of us do. It is either direct selling to the trim shop or they sell to a jobber or they do mail order. They sell locally word to mouth with the salesmen.

Q. Exactly what are the products of these companies and your company? Would you describe them? [380] A. Well, they sell convertible tops, replacement rear windows, pads, and some of them sell fabrics.

Q. Speaking about the manufacture of Aro Manufacturing Company, Inc., will you please tell us just what you make? A. Aro Manufacturing Company, we make convertible tops primarily. We make plastic rear windows. We make pads. We make danger flags. That's all, I guess.

* * *

[381] Q. Just what do you sell to these jobbers and shops? A. Convertible tops, rear curtains, plastic curtains.

Q. But with respect to the fabric tops, how are these sold to them? A. They are boxed as a unit.

* * *

Mr. Wolf: This is Plaintiff's Exhibit No. 11 and it was also Exhibit No. 17 during the deposition.

Q. Will you identify the various components which go into the box? A. Yes. This is the rear curtain that is supplied with the top and it is optional with the trimmer who confers with his customer whether he is going to

put the glass frame back in here or he can sew his own plastic in and make a full view curtain. If they order it as such, we also make it as a full view curtain with plastic on the insert.

Q. This is a solid piece of material? A. Yes.

Q. You mean this is taken out and a curtain is put in or stitched in? A. No. The trimmer, or the ultimate person that is going to install it, will sew a piece of plastic right along this bottom [382] stitching and then trim off the excess in here and trim this section of the cloth out.

Q. So he has to further process this and use a sewing machine to do it? A. Yes. He can order it this way or order it with a complete full view curtain. If he orders with full view curtain he is ready to go to work. There is a savings to the shop by buying it this way..

Q. Do you sell many this way? A. Yes.

Q. Will you estimate the percentage that go out in this condition? A. Oh, I would say about 60 per cent go out in this condition.

Q. This is the rear curtain area? A. Yes.

Q. Is the entire piece of fabric considered the rear curtain? A. Yes. Rear curtain assembly.

Mr. Wolf: Could we have this further identified by the Clerk? I believe the entire exhibit is No. 11. I think perhaps it would be better if we could identify portions of it; perhaps 11-A.

[Rear curtain area marked Plaintiff's Exhibit No. 11-A.]

Q. Will you please take the next piece? A. This strip of material approximately 3 inches by 60 is supplied on certain models of cars, Aro Part 130, 132, 134 and several of the General Motors cars of the later variety, and this [383] is to cover the front rubber strip located between the windshield and the front bow.

Q. Does that appear on all cars? A. Not on all cars. It appears on 130, 132, 134.

Q. I mean all the models? A. Yes, it has to be there.

Q. This is not an optional piece of material? A. No. This is to cover that foam rubber cushion between the windshield and the front bow. To make a weather-tight seal.

Q. How is this put on? A. That is covered and tacked on.

Q. Is there any stitching on this? A. It can be stitched or just put on, held by hand.

Mr. Wolf: I will offer this for further identification.

[Strip of material marked Plaintiff's Exhibit No. 11-B.]

Q. Please take another piece of material. A. The rest of this material is the top itself.

Q. You mean there are only three pieces in this? A. Well, there is trim, there is finish lace and the tacks.

Q. Look at the finish lace material first. A. This trim called Hidem is a two-cord 5/8 inch piece of material which opens in the center to accommodate a tack or staple. Then it is closed up in this manner so as to make a finish, and the other name for this material is the finish lace.

Q. Where does that go? [384] A. After the top is completely tacked on, all excess material is trimmed close to the tacking area and this covers the tacking area so there aren't any tacks showing on the outside of the car.

Mr. Wolf: I will offer this for further identification.

[Trim lace marked Plaintiff's Exhibit No. 11-C.]

Q. You have a bag there. A. This bag is something that we put into each of our units. It consists of ¼ of a pound of No. 6 light trimmer's tacks, six finish tips; those little chrome ends that go on the end of the finish

lace and six escutcheon pins, annular threaded, that go through the hole in the finish tape and secure it to the bows.

Mr. Wolf: I offer that.

[Bag containing hardware marked Plaintiff's Exhibit 11-D.]

Q. Now let us turn to this. A. This is the top proper, consisting of a left and a right side quarter, properly reinforced and bound, a valance which is the rain flap that goes on the outside of the rear curtain, and a center deck.

Q. In installing this, apparently they have to lace these things together; is that correct? A. They have to put the curtain on first and get that secured. Then the top is thrown over the car and the window flap is cemented in position first to assure the lining up. Then the—we are talking about a 134 now; right?

Q. All right. [385] A. Then the bottom side quarter adjacent to the section that goes inside of the car is spot tacked around the outside of the belt rail. Of course, previous to this the old top is taken off and the chrome strip around the outside of the car is also removed from inside the trunk, leaving a pack strip which is put there by the original manufacturer.

Q. In other words, they have thrown this over the frame after they have stripped it? A. That's right, after it is all stripped. Then it is down to this lower area from—

• • •

Q. And is tacked down? A. Then the top is pulled forward on the forward edge and the binding is lined up with the side windows for the best coverage and tacked in that position to a tacking strip also furnished or equipped on the original car.

The next process is—next step is to secure the valance or rain flap to the rear bolt, pulling up just far enough

to create a smooth appearance of the fabric over the rear quarter pad. The fabric is then slipped down between the wiper arm and the body and secured onto the existing prongs.

[386] Q. Apparently, then, in the installation, no one ever bothers to touch the wiper arm which you have described? A. No. Not to my knowledge. I have never seen it touched.

Q. What are the necessary tools for installation of this type of top, then, in the trim shop? A. The necessary tools for an installation of this type in the trim shop would be a tack hammer and possibly a screwdriver.

Q. Didn't you previously indicate some sewing might be necessary, and also shears, apparently? A. Well, yes, shears are necessary for trimming off the excess, or a sharp knife. The sewing that would be necessary would be on the rear curtain section and the front flap which is generally sewed around this rubber cushion, so to speak, for the front bow.

Mr. Wolf: I am offering this for further identification.

[Top proper marked Plaintiff's Exhibit 11-E.]

Q. You have examined the contents of this box containing Plaintiff's Exhibit No. 11 and you tell me whether you sell this with any other material that might be contained in the box, or is that the substance of what you sell? A. This box was taken off our shelf. It was ready for sale. It was in the inventory.

Q. Were there any directions in it when you took it off? A. No, there weren't.

Mr. Wolf: I would like to have the box further identified.

[387] The Clerk: No. 11 is marked on there already.

Q. Does this description you have given us in connection with the 134 top hold for your other model? A. Yes.

All models are basically the same, as far as what components go into the boxes and so forth.

Q. Do you, at any time, ever sell these kits to car manufacturers as original installations? A. No.

Q. You have an interesting code system. Will you explain the code system, or is it just arbitrarily selected? A. You mean our numbering system?

Q. Yes. A. We started with Model A Fords back in 1928 and we started on numbers 1 to 2, 3, and 4, and so on. 100s are Fords and Mercuries, where the Mercury is the same as the Ford. No. 2 would be General Motors; No. 3 would be Chrysler; No. 4 would be Studebaker; No. 5 we skipped; No. 6 would be our foreign cars; No. 7 would be Packards; No. 8 would be Hudsons. Consequently, if somebody said, "I want a top for a 1941 Ford," we knew to look in the 100 section.

Q. We have given considerable attention, Mr. Shapiro, or considerable attention has been given to the particular flap configuration of 134. Will you describe whether or not you have any other basic models that used this particular flap? A. No. These are the three styles we now manufacture.

Mr. Wolf: I am offering now three different pieces of [388] fabric.

Q. Will you first identify them? A. Yes. This particular one is what we call our shingle construction. This is designed with a half-inch roll stitched in and that sets in about ½ or ¾ of an inch above the body line and acts as an eave or a shedding device. This particular one is from a 1950-1951 Chevrolet, Pontiac and Oldsmobile, and the body line would be about ½ inch below this roll.

Q. Could you identify the other two pieces of material? A. Yes. This second one is the type that we use on our present 134s.

Q. The type of what? A. The type of flap and construction. There is no cushion and no shingle. This is just

a straight piece of fabric going down inside the car.

Q. That is the type we saw today in the garage? A. Yes, this is a 134 side quarter.

Q. Will you look at the third one? A. The third one is the type that, previous to notification of possible infringement, was the type that we were making and is still in existence on 1950, 1951, 1952, 1953 General Motors of original manufacture.

[389] A. That is a cushion sewed in and extending half above the body line and half below. It is approximately 2½ inches in height, and it has a heft of approximately ½ inch.

Q. Is this the type you say you made, well, before you were informed of infringement? A. Yes. This is a similar side quarter as was presented to me on the first day of the trial by Mr. Pollock, a top that came out of our box, No. 224, I believe, very similar in construction to it.

Q. Would you take this piece of chalk, please, and draw across in each one of these the location of the body line when the top is on a car?

Mr. Wolf: Properly installed.

Mr. Pollock: All right.

Q. Would you please mark it "body line"? A. Yes.

Q. You have done that on the top, the quarter, which you say was the type you made before notification of alleged infringement? A. Yes.

Q. Will you turn to the next piece of fabric, which is the type you say is made presently under the number 134? A. Yes.

[390] Q. Is that quite right? You have a little bow in the line. A. All right. [Witness draws chalk line on the fabric.]

Q. Would you mark that "Body line"? A. Yes.

Q. The third piece of fabric, please? A. The third is

our Model 224, which is the one that superseded the other one in question.

Q. Would you mark that with the line which indicates where the body line comes? A. Yes.

Mr. Wolf: I would like to offer these three in evidence as Defendants' Exhibits.

The Clerk: K, L, and M.

Mr. Wolf: I am offering as Exhibit K the fabric having a shingle, and L is the fabric with a cushion, and M is the fabric which has neither a shingle nor a cushion.

[Fabric having a shingle marked Defendants' Exhibit K;

Fabric having a cushion marked Defendants' Exhibit L;

Fabric without shingle or cushion marked Defendants' Exhibit M.]

Q. I noticed on that last exhibit submitted, Exhibit M, there was a double thickness of fabric. Would you explain the reason for that, please? In other words, the double thickness of the fabric at the flap area, so to speak? [391] A. The reason for that is it could be made in one piece with no effect on the function. We do that because it doesn't fit into our markers on the material very good, and consequently would create quite a waste of fabric, and that is pieced only for fabric-saving purposes.

Q. Where did you get this extra flap that forms the portion of the top which we have referred to today as the flap? A. Well, on a separate section of the marker there would be a space for it, and it wouldn't fit in if it were attached to the side quarter in one piece.

Q. Is that— A. [continuing] It could be where the valance is, a reinforcement. It may be an opening in the marker itself.

Q. In other words, it is an extra piece of material you

just placed into the overall design? A. Yes. And we seam it together to simulate a single construction.

Q. It has been stated several times, I believe, and I would like to have it clearly on the record at this point for continuity, and that is the purpose of this particular shingle as compared with the purpose of the cushion? A. Well, upon notification of possible infringement, this letter from Mr. Hall, we called in our attorney, Mr. Wolf, and he thought that there possibly might be some infringement. We asked his advice.

[392] Q. I don't want that. That has been gone into. I want specifically the actual different in function, one function compared with the other. A. I'm sorry. The function of the cushion is to make a seal as tight as possible between the wiper arm and body. The function of the shingle is not to make a weathertight seal between the wiper arm and the body but to shed the water from an arrangement above the body line, sort of a water chute.

* * *

[393] A. This is an Aro box, Regal quality, part 132, black outside, tan inside, fits 1951 Ford convertible.

Q. Would you open it up, please? Would you remove the various components which you find inside? A. We have a package of finished lace commonly called Hidem; we have a front strip approximately 3 inches by 60 inches to cover the front rubber strip between the windshield and the front bow. The tack bag is missing. We have a rear curtain assembly in cloth with a zipper, and we have a top assembly consisting of two side quarters, a left and a right, a valance and a center duct.

Q. Those are all stitched together? A. All stitched together.

Q. Will you open it up to substantially its full size? A. [Complying.]

* * *

[394] Q. Will you compare in toto the overall appearance and arrangement of this particular model with the 134 top? A. It is almost identical in design and practically the same in size all except for the section that goes down inside the car in the lower quarter.

* * *

Mr. Wolf: All right, we will disregard this, your Honor. I would like to offer this kit and its contents as an exhibit for the defendants.

[Box containing part 132 marked Defendants' Exhibit N.]

Q. Mr. Wolf: Could you identify the large piece of material by subscript, if possible?

The Clerk: The carton will be N. N-1.

The Court: The main top assembly.

[395] [Main top assembly marked Defendants' Exhibit N-1.]

Q. I would also like to ask with respect to Defendants' Exhibit 19 in the deposition of February 20, 1957, which models we originally presented did this correspond to? A. The shingle model.

Q. Is the shingle in substance identical? A. In style. Not length.

Q. Does this shingle have any resilience to it? A. No.

Q. What do you make the shingle from? A. It is a piece of fabric manufactured by the E. W. Twitchell Company of Philadelphia, called their half-round cord, firm. It is actually made of paper, similar to Kleenex if it was rolled tight.

* * *

[396] Q. In the other type of car in which you have no shingle, the 134 style, you just have a plain piece of fabric and I am wondering why you have a shingle on this particular construction and why you didn't put a shingle on the 134 type. A. The shingle construction

originally started with a precaution of possible infringement—

. . .

[397] Q. Could you indicate to the Court what the comparative expense, for example, in the shingle is as compared with the cushion construction? A. The shingle construction is very, very much of a saving in the manufacture over the cushion type. The roll that we put in there costs about a penny or a penny and a half a foot, whereas the shingle type I think costs us somewheres around 1s cents a foot.

Q. Now, you have a type 317? A. Yes, we do.

Q. What is that made for? A. That is made for a 1953 and 1954 Plymouth and Dodge.

Q. Do 1953 and 1954 Plymouths and Dodges have wiper arms? A. No.

Q. Does the fabric extend inside the body line at the rear quarter? A. Yes, it does.

Q. Does this 317 resemble, in any way, any of your other models about which we talked?

Mr. Pollock: Objection. What does the word "resemble" mean?

The Court: He said does it resemble in any way. I will exclude that as broad. You may lead the witness a little.

Q. Is your 317 type of top similar to, for example, your 134?

[398] Mr. Pollock: I object on another ground, your Honor. This Plymouth and Dodge construction is not one of those charged to infringe. It appears to be completely extraneous.

The Court: He may be getting to something. I wish you would lead the witness so we can find out.

Q. We have a 134, which you have spoken about, and a 317; is that correct? A. Yes.

Q. Is it not true these particular types of tops have generally the same cut and configuration? A. They are so close that if we didn't have parts numbers stamped on our segments of the top before they are assembled, it could be packed as a 134, it is so close in construction and design.

. . . .

Mr. Wolf: I would like, your Honor, without gilding the lily, to have the witness demonstrate the similarities of the two tops by comparing them side by side.

The Court: I think we will leave that for cross-examination.

Mr. Wolf: All right.

Q. I will, then, offer into evidence a 317. I will ask you first to identify it. This particular container which I now offer [399] to you. Will you identify that particular box? A. This box is a parts No. 317 box and a Regal quality. It fits all 1953 and 1954 Plymouths and Dodges. [400] Q. What does it contain? A. It contains a complete top assembly, two side quarters, left and right, a rear valance and a center deck.

Q. This center deck or the remainder of it is substantially the same as the 134? A. I would say that the important part of any top would be the side quarter section.

Q. The side quarter section? A. The side quarter section, it is practically identical. In fact I would have to scrutinize it myself.

Mr. Wolf: I am offering that as a Defendants' Exhibit. I also would like to keep the record clear, your Honor, to

The Court: I am going to exclude it. It may be marked for identification. I think we are going on a wild goose chase. I will leave it to the plaintiff to pursue the matter if he wishes.

Mr. Wolf: You are excluding this particular exhibit, your Honor?

The Court: Yes. The witness has testified to something which, it doesn't occur to me, to be material. If it troubles the plaintiff, the plaintiff can cross-examine. If the plaintiff does not wish to cross-examine, the testimony is in.

Q. Do you sell or make, or do you have facilities to sell or [401] make wiper arms, such as we have been discussing here? A. No, we do not.

Q. Do you sell or make or replace or in any way deal in drain troughs, such as we have seen in these model cars that we have examined? A. No.

Q. Do you in any way deal, in so far as sales or manufacture or repairs, in folding bows? A. No.

Q. Do you repair tonneaus? A. No.

Q. Do you at any time in your company, and I am speaking of both Aro Top Sales and Aro Manufacturing Company, conduct any repairs on the body of the car? A. No.

Q. The folding bow mechanisms? A. No.

Q. The drain troughs? A. No.

Q. Or the wiper arms? A. No.

Q. You spoke before about doing some small amount of work in connection with repairing cars to keep abreast of the trim field. In comparing these particular cars that come into your company for replacement of fabric tops, what do you do if there [402] is a broken wiper arm or bow, or something of that nature? A. We send it back to the dealer to get the body work finished, and then we put the top on.

Q. Do you have any knowledge as to what is customary among trimmers you have been associated with? A. Yes. If a car comes in and a wiper arm is missing, the trimmer will put the top on without the wiper arm. He might mention to the customer that the wiper arm is missing

and that he should go to his dealer, their authorized Ford or General Motors dealer.

Q. I pose the question: If the wiper arm is missing, from your knowledge do you ever find this wiper arm to be missing more than on an odd occasion? A. We have never seen one missing on a Ford. It is a common occurrence on, well, I couldn't say common occurrence, but it would happen, oh, one out of ten or fifteen on a General Motors car.

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[403] Q. What relations have you had with your dealers in so far as complaints are concerned? A. We have never had a complaint on the space between the [404] tonneau and the outside of the fabric, such as we witnessed in this last car that we have seen down in the garage. We have never had a complaint on the space in that area.

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Q. I am handing to you a series of work orders of apparently Aro Top Sales. Can you identify them, please? A. Yes. These are our office copies of bills and work that was completed. This one here is Invoice No. 28925, dated October 8, 1954, where we have changed a top on a 134 car. Tan De Luxe Quality with a full view. It was installed.

• • •

Q. For whom?

• • • •

Mr. Pollock: If it please the Court, I will stipulate that Aro Top Sales has done work for Ford dealers. I believe that will save a lot of time.

• • •

[405] Mr. Wolf: May I have a further stipulation that the work was done on factory—

Q. How do you term it? A. Authorization.

Mr. Pollock: I will not stipulate to that. I would require formal authorization, if there is such a thing.

Mr. Wolf: I believe Mr. Pickard testified yesterday there was no such thing.

[406] Q. Mr. Pickard gave some evidence or testimony this morning about the number of times a top is replaced, or at least his knowledge of it. Would you agree with his statements in that respect? A. I think his testimony was how long would a top last on a car of original manufacture, and I think he said three to four years. I will go along with three years generally as a maximum. The life of a convertible on the road would probably take about [407] five tops.

Q. Do you mean to say that you would consider the life of a convertible 15 years? A. Yes. Because where 1952 Ford sedans today are practically extinct, there are still convertibles around. A convertible is cherished a little longer on the road than a sedan.

The Court: Fifteen years average life?

The Witness: Yes, your Honor. We are still making a considerable number of Model A tops, your Honor.

The Court: Well, the Model A is a rather unique car.

The Witness: Well, we make 1933 Fords, we make 1941 Fords. We still cut them in production, your Honor.

The Court: All right.

Q. You say you still cut the 1941 Fords in production? A. Yes.

Q. What do you mean by that? A. We keep them in inventory. We do not wait for a special order to come in.

[408] Q. In simple arithmetic, then, you would calculate an ordinary convertible might require up to about five tops, is that right, during the course of its life? A. That is right. I would say the Model A Ford probably lasted longer than any of them, but with the advent of the

power tops, tops do wear out more frequently than they did years ago.

Q. There was also testimony offered there was great variation in the life of any individual top depending upon the atmospheric conditions or conditions in which that particular top was located. Could you tell me if there are any variations in the life of a top dependent upon the material that goes into the top? A. It depends on what fabric is used. Of course today they are using a lot of vinyls, which are more or less impervious to atmospheric conditions and sulphuric acids in the air. With the advent of electronic heat sealing, you take a 1955 Chevrolet, the material itself is still good but all the seams fell apart on the top, which constituted a new top, or which made it necessary to replace it. Today with the heat sealing and actually fusing the plastic together at the seams, I think convertible tops will last much, much longer than they did before.

Q. Will you tell me how often it has come to your attention that bows, wiper arms, must be replaced? A. Well, unless the car was wrecked—let me put it this way: under normal driving conditions, the way anybody would own a car and drive it and put their top up and down, I would say that the bows and wiper arms are designed to last for the life of the car.

[409] Q. Barring, of course, accidents? A. Yes.

Q. Will you state for the record what you normally find to be the cause of wear in a fabric top? A. Chafing is one; fading is two; and just normal deterioration because of the elements is three.

Mr. Wolf: Your Honor, we have here a number of tops which were taken from cars before replacement, which I would like to offer to show various conditions of wear, which might require replacement.

Q. Will you take these fabrics, one by one? I don't

know just what they are. Identify them for the Court. A. This could be—this is a 1954 or 1955 or a 1956, which is all the same model, Buick Super, Cadillac or a Buick Roadmaster.

Q. You can't identify it any better than all that? A. Yes, it fits all these models. 1954 Buick Super, Roadmaster or Cadillac.

Q. Will you note where the wear occurs in this particular example? A. This is where a bow would be right here, right in this area here. When the top was folded it would fold and press on this area here. This lower quarter section. This top has been dressed to try and preserve—to get the utmost of the life of this top. The original color was this light tan and it was dressed black. That was only as a last resort before somebody will do [410] something like that.

Q. What is this little cavity over here? A. This is something that appears on all General Motors cars. They call it a drip drain. Instead of following the body and coming in this way, it will drip and drop right into the drain trough.

Q. Do you notice any condition of wear on the body line of this top? A. No, that is in good condition.

Mr. Wolf: Your Honor, I offer this as defendants' exhibit.

[Used top for 1954 Buick Super, Roadmaster or Cadillac, marked Defendants' Exhibit O.]

Q. [Handing]. A. This piece of fabric denotes one of my previous statements that the fabric itself was probably still in one piece. It couldn't be cleaned, but the stitching has just rotted out of the top, which is very prevalent on these 1955 automobiles. This is also a 1955 Buick or Cadillac.

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Q. Will you please identify where you obtained these tops? A. These tops are tops that came into our own trim department for replacement.

Q. Did you personally salvage these as the cars were being— A. Yes, I did.

[411] Q. —as the tops were being replaced? [Handing.]

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Mr. Wolf: I will offer this as a defendants' exhibit.

[Used top for Buick or Cadillac marked Defendants' Exhibit P.]

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Q. Will you please identify that next piece? A. The next is off a similar model car showing extreme fading and cracking of the fabric and the cushion down below is still in relatively good condition.

Q. The flap down below the body line you say is in good condition; is that correct? A. Yes.

Q. While the rest of it is substantially faded? A. Yes. This is the other side of the fabric.

Q. Which is the outside? That is the inside? A. The dark side is the outside. The faded is the outside.

Mr. Wolf: I will offer this as another defendants' exhibit.

The Witness: This is the opposite side of this.

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[412] [Used top for Buick and Cadillac marked Defendants' Exhibit Q.]

The Witness: This is the opposite side.

Mr. Wolf: Could you include this second piece as part of the same exhibit? They are apparently from the same car, left and right [handing to the Clerk].

Q. [Handing.] A. This one is from a 1957 Plymouth convertible. It was removed because the stitching fell apart at the seams. This particular side quarter has a flap extending down inside the body, no cushion; no shingle.

Q. Does this have a wiper arm, this particular model? A. No wiper arm. It is just secured inside the body at the lower quarter section of the—.

Q. What is the original color of this car; can you tell me? A. White.

Q. The lower portion of the flap is the original color? A. Yes.

The Court: I understand this is offered merely to show wear?

Mr. Wolf: Yes, your Honor, conditions of wear. I would like to submit about ten in all.

The Court: All right. I didn't want the offer to be any broader than that without my knowing.

[413] [Used top for 1957 Plymouth marked Defendants' Exhibit R.]

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Q. Will you identify this particular piece? A. This is off a similar model car showing the color of the fabric as against the way it was originally. This fabric was impossible to clean and was replaced because of stitching failure and fading.

Q. Which is the inside and which is the outside? A. The black is the inside and supposedly white is the outside.

The Court: You say that is a 1957 model?

The Witness: 1955 model, your Honor.

The Court: The previous one, you said—

The Witness: Excuse me, 1954.

The Court: The previous one you said was 1957.

Mr. Wolf: Yes, your Honor, the light one.

[414] The Court: Then it wasn't the same model car.

The Witness: No. All these are the same model car except that Plymouth.

Mr. Wolf: I will offer this as Defendants' exhibit.

[Used top for 1954 Plymouth marked Defendants' Exhibit S.]

The Court: What I was getting at, they wouldn't fade that quickly in a year, would they?

The Witness: No, your Honor.

Q. Is this one year old? A. That is 1957, yes.

Mr. Wolf: Your Honor, this is a 1-year old top.

The Court: Are you saying, Mr. Shapiro, that top was white and turned from white to gray in a year?

The Witness: Yes, your Honor, that is the original color. I think it is the—

The Court: I got out of the Plymouth business just in time, I guess.

The Witness: The fine vinyl coating on there wasn't very cleanable. They all have a cleanable top coat on now.

Mr. Pollock: Then the gray is actually dirt?

The Witness: Just dirt—I don't know what it is.

[A brief pause.]

Q. Will you identify this piece of fabric? A. This is an original General Motors top taken from a 1954 Pontiac which is identical in construction to the 1954 Chevrolet. [415] This car in the 1953 Model used a wiper arm, movable wiper arm, that wiped against the cushion and caused a water-tight seal. This top is equivalent to our part No. 232 which goes on the 1953 and the 1954 Chevrolet and Pontiac. In 1954, General Motors, for some reason, changed from a cushion to a shingle, eliminated the wiper arm and installed this stationary bar which is visible on the inside, and it is screwed up against the body well inside and below the belt line. The belt line would be right here. Assuming this is on the other side. It is in this area right here. That is where the shingle is.

Mr. Wolf: We will show some further pictures of this car.

Q. Where did you obtain this particular fabric? A. In our own plant.

Q. Where did you obtain this piece of metal? A. That came out of Goldy's graveyard in Quincy from a wrecked car. It belonged on that piece right there.

Mr. Wolf: I am offering now this piece of fabric as a defendants' exhibit.

[Used top for 1954 Pontiac marked Defendants' Exhibit T.]

Mr. Wolf: Will you include the metal bar as T^1?

[Metal bar marked Defendants' Exhibit T^1.]

Q. Will you note the condition of wear on that model? A. Yes, I would say that that top should have been changed almost a year ago.

[416] Q. What year was that? A. 1954.

Mr. Pollock: What do you mean, it should have been changed?

The Witness: Normally a top in that condition is changed about six months to a year before it reaches that stage. That has gone pretty far. It is pretty shaggy.

* * *

Mr. Wolf: I would also like to offer these pieces of fabric.

Q. Will you identify these, please? A. Yes. This is taken from a 1954 Pontiac, a wrecked car, at Goldy's graveyard in Quincy.

Q. And the bar which is Exhibit T^1 actually came from this particular car? A. Yes. The reason we got the bar from this one, it was a wreck. That one, we had to put it back on the car.

Q. These are two pieces. Will you explain that? [417] A. It just happened to fall apart from the stitching. It goes in this manner. This belongs up here. That is the way that originally attaches, that way.

Q. I would like you to note on this particular exhibit the darkened condition of the flap at the position below the water line as compared with the lighter condition

above. Can you tell me what might have caused this darkness? A. I would say that water getting in from the elements and then the dust settling on the water caused a discoloration of the fabric.

Q. In other words, the water that passed down between the fabric and the body line? A. Yes.

Mr. Wolf: I will offer that as an exhibit.

The Court: That is a car that had no wiper on it?

Mr. Wolf: That had a fixed bar, your Honor. That was a 1954 Pontiac.

The Court: That is the kind of car that had no wiper arm?

The Witness: Yes.

[Used top for 1954 Pontiac marked Defendants' Exhibit U.]

Q. I would like to offer this last exhibit to show the condition of the wear. A. This is a 1954 Buick or Cadillac top. It seems to be in fairly old condition. I don't see any wear spots on it. It was changed because it was fading and it didn't make the rest of the [418] Cadillac or Buick look good with this particular top on it. In other words, it was changed for fading reasons.

[419] Q. Do you happen to recall the specific car this came from? A. I believe it was a 1954 Cadillac.

Q. Would you note the condition of wear below the body line in this particular model, the condition of fading? A. There is no condition of fading below the body line.

Q. In this particular piece of fabric could you tell me whether or not the cushion would have been pressed up against the body line here? A. Yes, it would.

Q. It would be, I presume at the line of clear demarcation which shows the lighter fabric from the darker fabric? A. Yes. That is the top of the tonneau, where the dividing line is.

Mr. Wolf: I offer this as an exhibit.

Mr. Pollock: This is on the car with the wiper arm?

Mr. Wolf: Without.

The Witness: Without.

The Clerk: Exhibit V.

[The above described piece of fabric marked Defendants' Exhibit V.]

Q. Do you know what the usual guaranties are for original tops? A. The factory puts a flat guaranty on all new cars, 90 days or 4000 miles.

Q. That includes the top? A. That includes the whole car.

[420] Q. Does that include Ford and General Motors? A. That is standard practice in the whole automotive industry.

Q. Would you say it is or is not reasonable to require a trimmer to supply his own flap and stitch it to a top that would not have a flap, in order to install, for example, a top on a 1952 to 1954 Ford? A. It wouldn't be feasible on our part to produce an article like that. I would say that maybe 30 or 40 per cent of the accounts we sell are not trimmers. They are only installers. They don't even own a sewing machine.

Q. Could you please tell us what your fabric tops sell for, the particular price range? A. We sell them from $13.95 to $40, depending upon the quality and the quantity discount that the customer gets. We have—well, our lowest price is $13.95 less 5 per cent.

Q. That includes the entire kit that you have shown us? A. That includes the top, the rear curtain, the trim and the tacks and tips, and so forth.

Q. Do you have any knowledge as to what the folding bow mechanism costs? A. I believe it is $415 for a Ford assembly plus $90 for a motor.

Mr. Pollock: Could we clarify: Whose price is that, your Honor?

The Court: Yes.

[421] The Witness: That is the price from the Ford Motor Company to an authorized Ford dealer.

Q. Do you have any knowledge personally of the cost of the wiper arm? A. No, I do not.

Q. We previously asked you about the scope of the trade.

Mr. Wolf: I would like to offer into evidence several volumes of the Auto Trim News, a trade publication. I believe my Brother counsel has stipulated that they may be so offered.

Mr. Pollock: We have stipulated, if I am not mistaken, that they may be offered merely for the purpose of showing that there is such a thing as an Auto Trim News and such a thing as a replacement top industry. These are not intended to be prior art or otherwise germane to this suit, is that correct?

Mr. Wolf: It is correct, as far as I know. I would offer these three.

The Clerk: W, X, and Y.

[Three volumes of Auto Trim News marked Defendants' Exhibits W, X, and Y.]

* * *

[423] Q. Have you sold directly to General Motors? A. Yes, we have.

Q. These purchase orders, they were received from General Motors, that I now hand you? A. Yes.

Q. Would you identify them? A. These are purchase orders from the Cadillac Motor Division, the New York Branch, which is a factory-owned subsidiary. The billing is through General Motors. The checks are made out by General Motors when it is paid. These are for replacement tops to their factory branch. One purchase order, No. 9180, September 25, 1957, calls for a black top with pads and full view window for a 1953 Cadillac. This No.

9432 calls for a top for a 1955 Cadillac. This 8152 calls for a 1954 Cadillac, and this 8904 calls for a 1954 Cadillac. In parentheses it says "Make up of coated fabric, same materials as used on 1957 Cadillacs."

Q. These purchase orders, are they typical of those you received from Cadillac? A. Yes. We have loads of those in the file.

Q. How far back do these purchase orders go? A. I would say they go back to 1953 or 1954?

• • •

[424] Mr. Wolf: I offer these as an exhibit.

The Clerk: Exhibit Z-1, 2, 3, 4.

[Purchase Orders, Cadillac to Aro, marked Defendants' Exhibits Z-1, 2, 3, 4.]

• • •

[428] Q. Now, as a result of this correspondence, what did you sell to the Ford Motor Company?

The Clerk: Exhibit AA.

[Letters concerning Ford Motor Company marked Defendants' Exhibit AA.]

A. We sold a cover for their new Ranchero. That was a combination truck and car.

Q. Just one? A. No, we sold many of them.

Q. To whom were they sold? A. Well, the Ford branches requested in several—in all instances, some requested 250 pieces, some requested 125, depending on the size of their area and how many dealers were under their authorization. They in turn mailed them to the dealers and requested that they order directly from Aro.

Q. I offer you one final purchase order from Ford Motor Company: Will you identify it? A. This is dated May 5, 1955, ten pieces convertible back curtain assemblies, and the price. This is a Ford Motors Company purchase order, original.

Q. Were those the ones you referred to previously?

A. This is the one on the curtains for the Somerville assembly [429] branch.

Mr. Wolf: I will offer that also as a defendants' exhibit.

The Witness: I originally said twelve; it is ten.

[Purchase order from Ford Motor Company dated May 6, 1955, marked Defendants' Exhibit BB.]

Mr. Wolf: Your Honor, I would like to offer in evidence at this time the agreement with General Motors and the agreement with Ford which were previously submitted with the motion for summary judgment, and I believe my brother counsel has stipulated they may be so offered. I believe that they are now in the possession of the Clerk.

The Court: They may be marked as CC and DD.

[Agreements with General Motors and Ford marked Defendants' Exhibits CC and DD.]

Q. Am I correct in understanding with respect to Ford, the only cars that had wiper arms in the body of their construction was the 1952, 1953 and 1954 Ford, Mercury and Lincoln, and the 1955 Lincoln; is that correct? A. Yes.

Q. With respect to General Motors, all the cars from 1950 to 1953 and what was it in 1954? A. There weren't any.

Q. All the cars from 1950 to 1953; inclusive. And none of those cars, as I understand the testimony, had inleaning fins. They all had cushions? A. That is correct. [430] Q. Except for the 1954 Ford. A. That didn't have a leaning in fin.

Q. I am sorry. It didn't have a cushion, either? A. That's right.

• • • •

The Witness: Some of the late 1953 General Motors had shingles instead of cushions.

Q. Which of those? A. It was the Oldsmobile, Buick and Cadillac and—I shouldn't say Chevrolet. I am not too sure on that.

Q. Do you know of any instances where General Motors used a cushion to effect a seal and then discontinued it, and then continued it again? A. Yes. The 1954 Oldsmobile, Buick and Cadillac had a cushion originally. Then it was discontinued and then they went back to it in 1955.

Q. Those, you say, did not have wiper arms? A. That is correct.

Q. Could you tell me something with respect to the time involved in obtaining a replacement top through a Ford or General Motors authorized dealer as compared with going directly to a trim shop or a company with whom, for example, you might deal? [431] A. I would say it would be a matter of weeks and possibly months, depending on the vintage, the age.

Q. Supposing, hypothetically, I had a car with a fabric top that needed replacement, say a 1952 or 1953 Ford, and I went to a Ford authorized dealer, would you know how long it might take to get an original top from the Ford Motor Company? A. I would say a 1952 to 1954 Ford, it would run, I should imagine, about four weeks to a month and a half.

Q. Would you tell me something with respect to the 1950 to 1953 General Motors car, as to how long it might take to get one from the General Motors dealer? A. I would imagine it would be about pretty nearly the same thing.

Q. Supposing I took the same car to a trimmer who would be buying your merchandise? A. If he had the top in stock, you could have the car in about three hours.

Q. How long would it take him to get the stock? A. Normally, if he was local, he could pick it right up. If he was out of town, just as long as the mail would take to get to him. I might add, Mr. Wolf, that Chrysler Motor Division replacement top section for factory replacement tops, they only employ one girl to handle the

whole country for replacement tops, and that is the scope of replacements that are requested from the original factory.

Mr. Pollock: That is Chrysler, you say?

• • •

[432] Q. Have you ever been requested, since notification of the existence of the Mackie patent, by anyone, to put cushions into your fabric tops? A. Yes, I have.

Q. When and under what conditions? A. When we stopped putting the cushions in it was right after that that we did get some letters from our distributor in New York and we have had several requests throughout the country complaining to us that why don't we use cushions the same as the original. But we never went along with them and put them in. We just said that is the way we manufacture them and that is the way they would have to be.

• • •

[433] Mr. Wolf: I can identify it by date. I would like to offer in evidence letter dated April 26, 1954, from the firm of Moore & Hall to Ezekiel Wolf.

Mr. Pollock: That was originally my Exhibit G.

The Court: I don't care what it was originally marked so long as it is now marked.

Mr. Wolf: It is attached, I believe, to Plaintiff's Request for Admission No. 5; is that correct? I would also like to offer into evidence the letter dated May 8, 1954, from the same firm to Ezekiel Wolf.

The Court: Strike out what I said a minute ago. I do care, and those do not need to be given any new exhibit numbers, since they are already in the file.

[434] Mr. Pollock: The original exhibit, Exhibit G, on the first letter mentioned. The second was Exhibit I, on the second letter mentioned.

The Court: Very well. Those won't be exhibits and are called to my attention and are in evidence.

Mr. Wolf: I would like to point out the letters preceding it, which they were a response to, have been offered in evidence as Plaintiff's Exhibit 9, I believe.

The Court: All right.

* * *

Mr. Wolf: I would also, your Honor, like to offer into evidence the entire deposition of Harold Shapiro, taken February 20, 1957, which has already partially been offered by my brother, together with the photographs which form a part of that deposition.

* * *

The Court: All right.

* * *

[437] Q. I am speaking about the right-hand side with the wiper arm removed. We raised and lowered the top. Before we raised and lowered the top we removed the wiper arm, and the fabric sagged in, after you removed it further than its location, before you removed the wiper arm. A. No. I think it sagged in after we raised and lowered it and raised it.

Q. Of course that is on the record. But it did sag in after the wiper arm was removed, is that correct? Is that your recollection? Is your recollection the same as mine? A. Yes.

Q. My point simply was, what do you attribute the cause of that to? A. Well, I would say probably the wiper arm did press the fabric to a certain extent.

* * *

[439] Q. With respect to the use of your kits, I would like to once again ask you, because I am not sure whether it was asked in this form, whether you know specifically the use of the kits once they are purchased from you? A. I couldn't swear to the ultimate use. It is naturally

intended, it is for a particular car, but once it leaves our plant or is shipped out we have no idea what anybody does with it. We assume it goes on as intended.

Q. I understand you said you sold principally to jobbers.

A. Yes.

[440] Q. And presumably selling in bulk to them, is that correct? A. Yes.

Q. From that point on you do not know how they distribute their wares? A. That is correct.

Q. We have been speaking of a 1954 Pontiac and a 1954 Chevrolet. I am going to show you some pictures and ask you to identify them in connection with that discussion that we had [handing photographs to the witness.] Would you identify those, please? A. This is a 1954 Chevrolet. Mr. Wolf and I were driving along and saw this car sitting at the curbstone, and just got out of our car and decided to take some pictures.

* * *

A. [continuing] Picture 1 identifies the car. We don't know who it belongs to.

* * *

[441] Picture 2 shows the shingle resting on top of the belt line of the body. Incidentally, this happened to be an Aro top that was on this car.

Picture 3 shows the stationary bar in lieu of the wiper arm, which would be located a couple of inches upward.

Q. I would like to have you mark that or indicate "stationary bar." A. Yes. [The witness complies.]

Q. Will you also indicate where the trough is on that particular model, looking at Picture 3? A. Yes. [The witness complies.]

[442] Q. I presume that that bar is rigidly connected to the body of the car; is that correct? A. Yes, it is welded on.

Q. And it does not, presumably, go up and down with

the folding bow mechanism; is that correct? A. No, that bar is secured permanently.

Q. Can you tell us about how far above or below the body line that is? Perhaps if you look at photograph No. 5 you could indicate by making a line where the body line would normally come. A. The stitching and cement line above the stationary bar is where the wiper arm would normally go in that particular car. That is the stitch line for our shingle.

Q. That is that light mark that goes across the photograph above that fixed bar; is that correct? A. Yes. We pre-assemble our parts with cement and the light hit that cement and reflects.

Q. Will you draw a line on the photograph where the body line would be? A. The body line would be here.

Q. Will you mark it out on the side "body line", on the frame? A. [Complying.]

Q. Will you identify photographs 6 and 7? A. Photograph 6 shows a picture taken from the open rear curtain on an angle to show the location of the flap secured [443] down on the body, on the trough, showing the fixed bar in position well below the body line.

Q. In the photograph it looks as though it is connected to that roughly triangular shape. Is it? A. No. That triangular shape is part of the folding mechanism and the bar fits flush against the fabric and is hidden by this folding mechanism.

Q. Will you identify Figure 7? A. Figure 7 is a little more of a closeup showing the stationary bar well below the belt line of the car.

Q. What top of yours fits this particular model car? A. Our part No. 232.

Q. What other car does it fit? A. It fits the 1953 Chevrolet and Pontiac, which is equipped with a wiper arm and a cushion.

Q. The operation of this 1954 model, could you tell me whether or not the fabric is interfered with in any way by this particular fixed bar? A. No.

Q. In its raising and lowering? A. No.

Mr. Wolf: Your Honor, I am offering these seven photographs in evidence as Defendants' Exhibits.

[Seven photographs marked Defendants' Exhibits EE-1 through EE-7.]

Q. During the tests we conducted downstairs, you secured, at the end, a fabric 134 top to the outside body line of the car? [444] A. That is correct.

Q. Can you tell me when this normally—can you tell me whether or not this was done by trim shops? A. It is done. It is done by some shops, I wouldn't say every time, but it is a practice in the industry. Not a common practice, but it is a practice.

Q. Have you found the flap—securing a flap below the body line aids in any way in creating a seal at the body line?

Mr. Pollock: I didn't hear the question.

Q. [Continued] Did you find securing the flap below the body line aids in the creation of a seal, in any way, at the body line? A. Yes.

Q. In what respect? A. By holding the material out taut on a downward motion.

• • •

[446] Q. What is the importance, if any, of attaching the fabric below to a trough in order to effect a seal above? A. No importance.

Q. What is the function of attaching the fabric to a trough below? A. As a guide for any water that got in.

Q. In other words, you would say that the importance is merely for water which has already passed the seal; is that correct? A. Yes.

The Court: Do you mean by that that the attaching of

the fabric below does not affect the width of the opening between the belt line of the car and the fabric?

[447] The Witness: No, your Honor.

The Court: You do mean it or you don't mean it?

The Witness: I mean it doesn't affect the opening.

The Court: Didn't your demonstration this morning show that it did?

The Witness: No, your Honor. The fact that the opening was a little bit larger was, the material loosened up. The material had elongated and torn on those prongs and we couldn't pull it down tight enough.

* * *

[448] The Witness: The way we have installed tops and seen them installed throughout the country, it doesn't make any difference which position the wiper arm is in, your Honor.

The Court: That does not affect, in any way, the opening between the belt line of the car and the fabric?

The Witness: It possibly could affect the distance between the belt line and the fabric—

The Court: If you mean it doesn't make any difference, you are concluding any ultimate difference, and not any physical difference?

The Witness: That is correct.

* * *

Q. I am directing my question to taking specific instances, and I am directing my questions to the 1952 Ford having an Aro top on it, presuming that the wiper arm is secured in the location [449] recommended by the factory, which I understand is 3/8 of an inch from the body line, if we have a 134 top on it secured to the trough and then we remove the fabric from its secured position on the trough by releasing it from those prongs, would it in any way affect the space between the fabric and the body line? A. No.

Q. If—

The Court: And the reason for that is what? Because the space is fully determined by the wiper arm?

The Witness: No, I think it is the longitudinal—the strain is on a perpendicular, the side quarter and the trough, the material would fall in a straight line and the longitudinal strain of the cloth being taken on the outside, and the window flap being screwed in place on the other side, but putting a horizontal strain wouldn't allow the fabric to fall in. It would be on a straight line.

The Court: Although I thought the strain was vertical.

The Witness: It is also horizontal because it is attached at the rear window and where it is tacked on the belt line.

The Court: When counsel was inquiring about attachment, I thought he meant the bottom attachment to the trough.

Mr. Wolf: I am presuming it is still attached forward and rear, your Honor.

The Court: I thought so, too. Maybe I misunderstood.

Mr. Wolf: I believe the witness' answer was that the [450] wiper arm itself doesn't solely determine this position because the forward and rear securing areas still hold the fabric in some relative position.

* * *

Q. Assuming we had a 1952 model car with an original top with a cushion and we released the fabric from down below, what effect would that have on the seal? A. No effect.

* * * * *

[451] Q. Mr. Shapiro, I believe you testified that your company manufactures a part #224. Will you please tell us what automobile that part number is for? A. 1950, 1951 and 1952 Oldsmobile 88, Buick Special, Chevrolet and Pontiac.

Q. Those cars have wiper arms, of course? A. Yes, they do.

Q. I believe you also manufacture a part #223? A. Yes.

Q. Will you please tell us what that fits? [452] A. That fits the 1949 Oldsmobile, Chevrolet and Pontiac. Excuse me. On the previous statement, it doesn't fit the Buick Special. I made a mistake.

Q. I take it that the 223 model is designed for cars without wiper arms? A. Yes, it is.

Q. Can you tell us the difference between 223 and 224? A. The actual fit of the top could be interchanged, the only difference being in the lower quarter section. The frame structure, the bow structure, the folding mechanism, is practically identical, and the 223 could be put on a 224 car.

Q. Do you mean the top numbered 224 can be put on a car for which you would normally design a 223 part; is that right? A. Yes, they could be interchanged either way.

Q. What modifications would you have to make? A. By bending up the lower flap and installing fasteners in the top itself, the fasteners being on the body originally for the boot.

[453] Q. Is this the same type of modification you showed to us in the demonstration yesterday? A. Yes.

Q. Would the 224 top then appear similar and be installed in a similar manner as a 223? A. The only difference being on the 223 there is an inverted lip that interlocks with a chrome —what is the opposite to invert?

* * *

Q. Would this difference be of any significance as far as the trimmer is concerned? A. No.

Q. I have here a copy of your deposition, taken February 20, 1957, and I invite your attention to Question 269, which reads:

"Q. Does the idea of having a section of fabric coming down inside the car and actually fastening on

part of the car, for instance, adjacent the trough, is that the important thing?

A. That is correct."

Could you explain what you meant when you spoke about that, when you gave that answer?

• • •

[454] A. The answer at that time was "That is correct." Since then we have conducted tests and have checked with shops in the field and have found it was not necessary to attach the lower part of the flap to the trough, that if it was left loose it meant absolutely no difference in appearance or things of that nature.

• • •

[457] The Court: Hasn't one of the plaintiff's witnesses testified if there was no wiper arm, there was no infringement, in his opinion?

Mr. Pollock: I don't recall that exact testimony. It is possible.

The Court: It came pretty close to that.

Mr. Pollock: It could very well be.

The Court: I was thinking of Mr. Pickard, although I am not sure.

• • •

The Court: Mr. Pollock, let me ask you, if I misunderstood that witness, perhaps— You wouldn't necessarily be bound by what he said, anyhow—what is your position? Would you say that a top which had no wiper arm used in connection with it could be an infringement of your patent?

[458] Mr. Pollock: I would say, your Honor, that a wiper arm or something equivalent should be provided.

• • •

[459] Q. Did you ever have occasion to manufacture a fabric top for Hillman-Minx before 1949? A. Yes, we

make a top for a 1948 to 1955—1954, inclusive, and another one from 1955 to 1957, inclusive.

[460] Q. Could you describe the rear quarter section of the 1949 and earlier Hillman-Minx? A. Yes, the side quarter section came very similar to our present day cars. It had a flap extending approximately 4 or 5 inches into the lower tonneau adjacent to the rear quarter window. The length—or the width, I should say, is approximately 3 inches. Then it is shaped and tacked on the outside of the car. About 4 inches deep and about 3 inches wide, the flap extends down into the tonneau and is connected to a hook arrangement located on the fender well by means of an elastic band stitched to the lower end of this flap and is secured in that clip.

Q. In both of these structures, how far away, in a properly installed fabric top, would the fabric come from the body line in this flap area? A. It would be touching the body line.

Q. Supposing you had some seepage of water passing between the fabric and the body line in this area, where would the water go? A. Down through the fender well and out through a drain in the bottom of the car.

* * *

[461] The Court: In the case of the Hillman, to raise and lower the top, was it necessary or desirable to unfasten this flap on the inside of the car?

The Witness: No, your Honor. It is an automatic device. That is possibly the purpose of the elastic, to give and then retract to its normal position.

Q. You mean it was almost permanently secured in that area? A. Yes, it was.

* * *

[462] The Clerk: Defendants' C through J are now in evidence.

[Photographs formerly marked Defendants' C through J for Identification, received in evidence.]

Q. I am handing you a series of five photographs, and I would like to have you identify them. They have been consecutively numbered.

Mr. Wolf: I have here a duplicate set, if your Honor would care to see them [handing photographs to the Court].

Q. Could you identify those photographs? A. These photographs were taken about two weeks ago at the Aro Top Sales installation room of the 1953 Ford convertible, part No. 134.

Q. Could you please tell us the circumstances under which these pictures were taken? A. The circumstances under which these were taken was to prove that the wiper arm or the fastening down inside the tonneau would have no consequence as to the function or appearance or the net result of this convertible top.

* * *

[463] Q. Will you please go on and indicate more specifically the type of car and whose car was involved in this test? A. This car was a car that we borrowed from a dealer. I have [464] one correction to make. This is not an Aro Top on here. I did make an error there.

* * *

Q. What kind of top was it? A. This top is a custom made top, utilizing the original cushion that originally appeared on the top made by the Ford Motor Company.

The Court: How is that going to help us?

Mr. Wolf: Your Honor, it will show that an original cushion, that a seal will still be effected with an original cushion, even when you release the fabric from the lower portion. In other words, your Honor, it will show—

* * *

[465] Q. Would you explain the photograph in sequence,

please? A. Photograph No. 1 shows the top the way it was received by us on the car in its original state. Photograph No. 2 shows the flap down below being released from the prongs and completely disengaged from the body of the car.

Q. In Photograph No. 2 there appears to be some extra fold of cloth above the wiper arm. Could you identify that, please? A. Yes. That is the cushion as made by the Ford Motor Company, so it is not visible on the outside while the cushion is on the inside.

The Court: Does the cushion usually pucker up like that?

The Witness: Yes, your Honor.

Q. Would you identify Photograph No. 3? A. Photograph No. 3 shows the top in a partially recessed position and denotes that the seal between the wiper arm and body is not changed at all.

Q. Could you tell us whether or not this photograph depicts [466] the top in a partially raised position after being lowered all the way and then up again or just having gone down partially? A. This top was recessed completely, and this is in the partially raised position.

Photograph No. 4 shows the top completely raised and locked in position and compared to the original status of the car, it is in the identical same position.

Photograph No. 5 shows the exterior view as compared with Photograph No. 1, showing absolutely no outward change in appearance.

* * *

The Clerk: FF-1 through 5.

[Photographs marked Defendants' Exhibits FF-1 through 5.]

Q. Can you recall what the space was between the fabric and the body line before and after you conducted these tests—pardon me—before and after you raised and lowered

the top with the fabric removed? [467] A. There was a space of approximately an eighth of an inch with the cushion, and that was before, and the same space prevailed after the demonstration.

Q. How much of a space remained before you removed the fabric from the trough, from its connection to the trough, and after you replaced it? A. There was no difference.

Q. Was there an eighth of an inch opening also? A. Yes.

* * *

[471] Q. Would you consider, in your experience, the replacement top trade to be competitive? A. My answer was, very competitive.

Q. Do you have much local competition? [472] A. Yes. Every individual shop is a competitor. Our contention has always been on a national scale we may not have too many competitors but in your local area it is pretty hard to beat a man that can work out of his garage in the backyard, and so forth.

* * * *

Q. You mean you never increased your prices—. I see. Outside of loss or damage through accident, have you ever seen a wiper arm or a bow mechanism fail before the car itself was perhaps considered at the end of its useful life?

* * *

A. Under normal usage of a car, I would say that the metal bows and wiper arms will last the life of the automobile.

* * *

[473] Q. You might indicate why the General Motors car—why, in General Motors cars the wiper arm is missing in one out of fifteen. A. It is connected on the forward end of the pillar post on a bolt that actually pivots every time the top is raised and lowered. The rear section is only pushed into a slot. If the forward bolt from

raising and lowering the top, isn't set with the small [474] recessed screw, they have to hold it in position, it will unwind and fall off and fall down into the fender well section, whereas on Fords the wiper arm is riveted to another piece and put through with a cotter pin in there, with two bolts on the rear end of the wiper arm, and it is practically impossible to fall off.

Q. Then in connection with the General Motors cars you would consider it perhaps the failure of the bolt rather than the wiper arm that causes the wiper arm to be missing? A. That is correct.

* * * *

Q. Those wiper arms that you do salvage or you have seen in the fender well, can you tell us what condition they appear in? A. In perfect condition.

* * *

[475] Mr. Pollock: This is the deposition of February 20, 1957. First, in regard to the Hillman-Minx and the like, I invite the Court's attention to pages 70 and 71 of this deposition. Reading from 290 Q:

"What was the first automatic top you had or which you manufactured which had a flap which was permanently attached to the inside of the car? A. 134."

* * *

[476] "291 Q. That was for 1952 Fords. Didn't you make— A. I mean 224.

292 Q. For the 1950 General Motors car? A. I mean 224.

293 Q. That was the first top fabric which you manufactured which had the flap which extended inside the car and was permanently fastened there to give you an automatic top? A. That is right.

294 Q. Do you know of any other top automatic in nature which had a flap extending inside the car and

fastened to the interior permanently to give you automatic operation? A. No.

295 Q. Prior to 1950? A. No.

296 Q. You don't know of any others? A. No."

* * *

[478] The Court: Not at the moment, but—this is merely inquiry, rather than any view on my part—but isn't the significance of the wiper arm that it holds the material over that way in case the car is designed so that it doesn't need to push it? It still has an effect?

[479] Mr. Pollock: I think that is definitely one of the points in that it restrains inward motion of the fabric beyond a certain point.

The Court: That is what I mean.

* * *

[480] *Re-cross-examination by Mr. Pollock*

* * * *

[486] XQ. Mr. Shapiro, yesterday you were discussing the prices of your tops. Do you recall what your testimony was in that regard? What were the prices you said you charged for your tops? A. We charge, our lowest price is $13.95 less 5 per cent, and the highest price we charge for the exceptionally high quality fabric, and so forth, would be about $40.40.

XQ. That you are charging whom in this regard? A. Well, the $13.95 would be the price of the top to our jobbers, and the $40.40 would be a price to a trim shop. The $32.90 is the price the jobber would pay for the highest price top that he would buy from us.

XQ. So that the trim shop pays about $8 more than a jobber, is that right? A. The jobber buys it for $13.95. The trim shop would pay anywhere from $18 to $22, depending upon the jobber's markup, and what section of the country it is, with freight, and so forth.

* * *

[487] The Court: I mean a customer. Suppose I am a handy [488] man with a screwdriver and I think I can install my own top, Mr. Shapiro. I live here in Massachusetts. What can I do to avoid paying for the labor?

The Witness: Well, you could go into a trim shop. He would probably work on a lower price top, that would cost him approximately $16.70, and he would probably charge you somewhere around $21, and make $5 on it.

XQ. How about the more expensive top? A. I think he would prorate it up. On a top that would cost $40, he would probably charge $55 or so.

* * *

[489] The Witness: You are charged $15 plus the price of the top.

The Court: $55, and he charges me then about $70.

The Witness: That is correct. He could install that top in approximately an hour and a half to two hours, depending on whether he was any good.

The Court: I don't care how long it takes him. I am interested in what I have to pay. It would be about $70 for the top that you got $40 for?

The Witness: Yes. I think the price on a car like that would be somewhere around $70.

* * *

[490] XQ. Do you recall that one of the defendants, Mr. Hamlin gave [491] a deposition in this proceeding? A. Quite a ways back, yes.

XQ. Do you recall he stated at that time that the cost for the complete folding bow mechanism and linkage and arrangement of the bow mechanism of a new 1957 car at list price is $375? Would you like to see this affidavit? A. That is for a 1957. There may be simpler arrangements in it.

* * *

XQ. You said you did not know how much a wiper arm cost? A. No.

XQ. Didn't you ask these people when you called them up on these other prices? A. No.

XQ. Well, could you explain why you neglected to ask them this? It appears to be pertinent. A. A couple of days before this trial started I went down to a Ford dealer, I went down to an Oldsmobile dealer, and I asked to see their shop manual, the book that is used by their mechanics as a bible, showing how any possible part of the car can be adjusted or fixed or repaired, and in no instance have I found any mention whatsoever in Ford's manual or the General Motors manual in any way relating to a wiper arm adjustment, cost or what-have-you. I think it is probably part of the complete frame assembly. I imagine the individual part can be bought. [492] It wasn't available to me at the time.

* * *

XQ. Would you be surprised if I told you that the wiper arm cost in the order of a dollar?

* * *

A. I imagine it wouldn't be much more than that.

* * *

[494] XQ. Is it your statement that every Aro top comes in a package with these instructions? Is that accurate? A. Yes. But the instructions, the reason we dropped that out of our subsequent catalogues is because the instructions became null and void, were not pertinent to the 1953 and 1954 installation instructions.

* * *

XQ. Isn't it true that subsequent to this time you started issuing instructions separate from the boxes? A. Only on —at a time when the cars became different than conventional installations.

* * *

[495] XQ. So after you dropped the instructions out of some of the boxes, you did prepare an instruction manual for distribution to the public? A. Yes.

XQ. You also say you gave instruction at some clinics? A. Yes, we did on the 1955 Fords and 1956 Fords.

• • •

[499] XQ. Well, doesn't the wiper arm provide a limiting position for the fabric with regard to the belt line? A. Only as far as if you press the fabric from the outside.

XQ. If you try applying a force to the outside it can't go in beyond the position of the wiper arm? A. Yes.

• • •

XQ. So that, as I understand your latest testimony, the wiper arm does restrict the inward motion of the fabric? A. Yes, if outward pressure is applied.

• • •

[500] XQ. Now, as I recall your testimony, you stated that in your top fabrics you tried to get around a 3/8 of an inch gap; is that correct? A. We don't try to get any. It is just the way the material goes on.

XQ. I see. You say the provision of a gap is of value in reducing chafing. This is your testimony? [501] A. That is one of the features.

XQ. Is the 3/8 of an inch dimension a vertical dimension? A. We don't make a top to fit a particular dimension. We just put it on the car and put it on, and where it falls, it falls, and in practically every instance there has been a space of between 3/8 and 1/2 of an inch on all Aro tops.

XQ. Would you consider if the space were in the order of 1/4 of an inch it might be better from the point of view of operation? A. It wouldn't be better or worse.

XQ. 1/4 inch and 3/8 of an inch are the equivalent, in so far as you are concerned? A. Well, we wouldn't make

adjustments in the car to fix that space. The way it goes on the original frame, that is the way it stays on.

XQ. I am just asking you about a top, if it had 1/4 inch would it be better for the operation of the car than a 3/8 inch gap? A. I wouldn't know.

XQ. I suppose the same answer would apply if I were to ask about 1/8 of an inch and 3/4 of an inch gap? A. If the eighth was true all the way down, it possibly could. If you get such a tolerance of 1/8 of an inch it is possible it would be touching in some areas and cause chafing.

XQ. Would you say it is better or worse? A. I would say that from my own personal viewpoint, if I owned a car and had a top put on, I would like a space to be more than [502] an eighth of an inch.

• • •

XQ. On these exhibits which you identified this morning as FF-1 through FF-5, and I invite your attention to picture FF-4, where the fabric is loose below the belt line— A. Yes.

XQ. Is that fabric lying outside of the trough now? A. It is lying outside the trough but possibly—that was laid outside the trough for this particular demonstration.

XQ. If the car were actually in use in this condition, any water tending to get past the cushion would run along the fabric in that region and drip outside the trough; is that correct? A. Yes.

• • •

[503] XQ. You said the shingle sets half an inch above the belt line; is that correct? A. It is normally designed for that purpose, yes. Half or three-quarters of an inch.

XQ. That is actually where you drew the white chalk line? A. Yes.

XQ. As a matter of fact, isn't it quite normal for the shingle to set right on the belt line? A. The fabric that

the convertible tops are made of in the past have been more or less of a stretchy piece of fabric, especially in the lower quarter section where it is biased. It is sort of on a diagonal, and consequently more stretch is available in that area than it would be if it was cut on the straight. It is possible if a strong trimmer could pull down tight enough, he possibly, through an improper installation, could pull the shingle down to meet and overlap the body line on the outside.

* * *

[504] XQ. As I understand your answer, you say the shingle did fit on the belt line at least part of the region; is that correct? A. I did not say that. I said it raised up on the forward edge.

XQ. Where was it on the rear edge? A. On the rear edge it was almost on the belt line, extending to the outside of the belt line. Not in between the belt line [505] and the wiper arm.

XQ. You say it was on the belt line? A. It was close to the top of the belt line. In an extending manner outside the body.

XQ. You say also it sat up, you say an inch, in the front? A. Possibly an inch.

XQ. That didn't impair the waterproofness of it? A. It didn't impair the direction of water. It still directed the flow of the water to the outside of the car.

* * *

XQ. Do you recall observing where the shingle sat on that car? A. It sat very close to the belt line, also extending to the exterior of the car.

* * *

XQ. I am not asking you that. Do you see the shingle? A. Yes, I do.

XQ. Where is the shingle actually located in this car?

A. The shingle is resting on top of the belt line at the rear end, above the belt line on the front.

* * *

[506] *Redirect Examination by Mr. Wolf*

* * *

[507] Q. You testified just a moment ago if the fabric were released [508] from the trough, the water would drop outside of the car, the water that rolled down the fabric. Could you please tell me just where the water would fall into? A. On what kind of a car?

[509] Q. Well, I think we specified we are talking about a 1953 Ford.

* * *

A. Yes. The water would follow the fabric down and go between the body, the inside edge of the body shell and the fender well and subsequently out through a drain at the bottom of the car.

Q. You also testified that as to the relative cost of the fabrics and installation involved. Could you please tell us what the least expensive installation an individual could expect on, for example, a 1952 to 1954 Ford?

* * *

The Court: Go ahead.

A. I would say it is common practice, at least in the city of Boston, Providence and Portland, Maine, where things are competitive, there are installation tops of that nature for $30 complete, labor and materials.

Q. Is that with one of your $13.95 tops? A. Yes. They don't pay $13.95. They pay more.

Q. You mean the trimmers pay more? A. The trimmers pay more.

* * *

[512] Mr. Wolf: Your Honor, I should like to offer in evidence certain Defendants' Requests for Admissions and the Answers as well as Interrogatories. With your Honor's

permission ' would merely give the Interrogatory numbers and the Requests for Admission numbers, and perhaps that would suffice.

The Court: All right.

Mr. Wolf: Interrogatories 1 through 6, 8, 10, 12-A and 12-B, 18, 22, 24, 25, 26, 88 and 89, and the Answers thereto. I should also like to offer in evidence Defendants' Requests for Admissions 7, 8, 9, 12, 13, 26, 27, and the Answers to 27-MM and VV and 43.

• • •

[513] PETER JOSEPH BROSENS, Sworn

Direct Examination by Mr. Wolf

Q. Mr. Brosens, will you please state your name and address? A. My name is Peter Joseph Brosens. My address is 34 Dundonald Road, Belmont, Massachusetts.

Q. Would you please give us your present occupation? A. I am now an Instructor in Mechanical Engineering at the Massachusetts Institute of Technology, and consultant for the Air Force Missile Development Center at the Holloman Air Force Base, New Mexico.

• • •

[518] Q. Have you ever made any study of convertible tops of, say 1952 to 1954 Ford motor cars and cars in the same period of time? A. Well, for the purposes of my presence here, I have conducted some studies and I have paid particular attention to the principles involved and the functions of the components of these structures. I have not tried to acquire very thorough knowledge of the exact sizes and shapes of the structures involved in these constructions.

Q. Do you understand the function of the constructions which you have seen? A. Yes, I do.

• • •

[519] *Cross Examination by Mr. Pollock*

XQ. How old are you, Mr. Brosens? A. I am 24 years old.

XQ. When the 1952 Ford came out, you were—that was six years ago—you were about 18; is that correct? A. That's correct.

XQ. I assume you are going to be discussing certain prior art patents cited by the defendant, some that go back to 1939? A. Which I have seen recently, yes.

XQ. And in 1939 you were— A. 6 years old.

• • •

[520] The Court: You have no familiarity with the convertible tops field except a paper familiarity; is that a fair statement?

The Witness: That's right. I can study them on paper.

• • •

[521] XQ. Yes. Could you give me an estimate of the total time you actually spent looking at convertible automobiles for the purposes of preparing yourself for the testimony here? The total time? A. I would say five hours.

XQ. And you had no other experience in the convertible automobile [522] field other than this? A. No, I haven't.

• • •

XQ. Have you ever actually done any work in the automobile field? Any work? Have you ever worked for anybody that does any work for automobile manufacturers? A. No.

XQ. Are you familiar with the problems which automotive manufacturers encounter in the convertible top field? A. Yes, I think so.

XQ. Does this familiarity arise out of some experience other than your paper reading? A. Yes, I have tried to—I have asked a number of questions, mainly to Mr. Shapiro, to understand what the problems are of the trim makers. I have sometimes asked him why something is not done in

anotner way, and questions of this kind, to understand what, practically, the construction of the top is.

• • •

[523] XQ. And his answers have now become a part of your sum total knowledge; is that correct? A. Yes.

XQ. So that when a certain problem comes up and you testify on it, it may be because of what Mr. Shapiro told you about the situation? A. Yes.

XQ. Have you had any other experience in the convertible top field or in the linkage field other than the experiences we have discussed so far? A. Yes. I would say that I am familiar with the problems in the linkage field. I can remember two seminars in the linkage field given at M.I.T. which have familiarized myself with the different kinds of linkages.

XQ. Were these automobile linkages? A. I would say these are quite more sophisticated linkages than the ones I have seen in these structures.

XQ. These seminars, then, did not apply to automobile linkages? A. They might have. They were of an abstract nature.

• • • •

[524] XQ. Your total experience with linkages was from these two seminars, as I understand it? A. Oh, no. I mean in the course of my own training I have encountered linkages, of course. There is a one-term course at M.I.T. which is practically—we practically face problems with linkages and gears.

• • •

[526] *Redirect Examination by Mr. Wolf*

Q. I might ask you, have you ever received instructions from me with respect to the interpretation of patents? Have I outlined what the problems are that are involved? A. You have. And of my own curiosity I have asked questions with regard to the law.

[529] The Court: I would say, without in any way meaning to reflect upon the witness, that he is what I would call in many respects a home-grown expert. He learns from counsel for the defendant and he learns from the defendant the things that he will need in order to testify, things of which he has had no previous experience. I will hear you, Mr. Wolf.

[530] Q. Have you drawn your own conclusions with respect to the operation of the Mackie patent? A. Yes.

Mr. Wolf: I would like, your Honor, at this time to offer in evidence two sets of references which we have marked Primary References and Secondary References. The Primary References are the ones which we intend to consider at this time. I would like to offer them at this moment.

The Clerk: GG and HH.

[Primary References marked Defendants' Exhibit GG;

Secondary References marked Defendants' Exhibit HH.]

Mr. Wolf: The Primary References, your Honor, include paper copies of prior United States Patents Bessonneau 2,185,581, Bessonneau 2,157,783, Bessonneau 2,479,599 Ackermans 2,549,153, Oliver 2,046,574, Coppock 1,778,356, SaCouto 2,074,620, Rinker 2,065,027, Campbell 1,809,505. In addition, they include several foreign patents, British Patent 564,361, and French Patent 775,822, British Patent 564,361. For your Honor's convenience at the back of this group of Primary References I have included a copy of the Mackie Patent itself.

[533] Q. Would you please interpret the structures which you have observed in this Mackie patent? A. The general area described in the Mackie patent is the rear quarter,

which I understand to be the side of the car which extends from the window to the rear edge of the fabric top. This structure in the Mackie patent involves essentially what is called a 4-bar linkage, which is the simplest kind of linkage. It involves a linkage member bow of the top structure, which is numbered 1, in Figure 1 of this patent. The next member, the next linkage is the piece numbered 10, which is the so-called wiper arm or may be also the pressure arm in the patent, and the third linkage is a piece numbered 13, which contributes to the overall comparable motion of these three. The fourth linkage is usually understood to be the solid structure between the pins 2 and 14, shown in the same Figure 1, in the Mackie patent. From the reading of the language in this patent and in the file wrapper in the patent—

* * *

[537] The Court: That isn't the way he was answering. I am [538] going to rule that this witness has not got the qualifications to answer all questions that a full expert that I would regard and accept in a patent case can do. Within limitations I will take certain assistance from him that he can furnish, but the scope that he has started out to set for himself, or that you have set for him, in the exercise of my discretion, I say it is too much.

* * *

[539] Q. I believe when we were interrupted for our break, we were discussing the construction of the Mackie patent. Will you continue with your discussion of that disclosure, please? A. I think I stopped when describing the actual linkage structure of the bow, wiper arm and guiding linkage 13 in Figure 1. These linkages are made to operate when the bow structure is raised and Figure 1 shows the fabric 20 attached to bow 1 on the rear edge which is not numbered in Figure 1, but which appears under the arrow indicating the cross section 6.

Figure 2 illustrates that in the raised position the wiper arm or pressing arm 10 has a small contour 11 which comes into contact with the fabric 20 and presses this fabric to the resilient member 27. The function accomplished in this operation is, then, one of closing the otherwise loose contact between fabric 20 and the resilient member 27 by some pressure distributed on the fabric around the edge of that resilient member 27.

The fabric 20 is usually—well, it has to be waterproof and usually its outer surface is not smooth, but rough. In most instances I have seen fabric 20 will have—the very outer surface is just permeable cloth. This means that in order to obtain a seal between the fabric 20 and 27, as shown in Figure 2, which is of reasonable effectiveness, it is necessary to produce [540] considerable pressure between the fabric and the resilient member 27 so as to minimize the thickness of that portion of the fabric material which is permeable. Figure—

The Court: I'm afraid I don't understand that.

The Witness: You can consider that the fabric 20 is made, for instance, of three layers, the inside being cloth, the middle layer, which is rubber, and the outer layer, which is again cloth, and the cloth is not impermeable and it is not smooth. So in between the middle layer made out of rubber and that fabric 20, and the resilient member 27, when you have a contact between the fabric 20 and the resilient member 27, you, in effect, have there a thickness of permeable material, which is the last layer of the fabric material.

The Court: And you say it is necessary to exert a good deal for what reason?

The Witness: So as to minimize the thickness of that layer of fabric which is permeable.

* * *

[542] The Court: Watertight against how much pressure?

The Witness: No matter how much pressure it is not going to be perfectly watertight.

The Court: Let's put it the other way. No matter how little pressure, I suppose there isn't very much. When you say watertight, I noticed that you used the word "perfectly watertight." Have you any experience in the automobile industry, the convertible top field, as to how tight watertight has to be in order to be effective?

The Witness: The watertightness will depend on the pressure you produce between the fabric.

• • •

[543] Mr. Wolf: Well, it describes a seal, a closure, a watertight seal.

The Court: It describes the seal as being a weather seal.

• • •

The Court: The witness is interpreting that to mean it must be a perfect closure. Yet, as you brought out yourself, I think it was you but now my memory may be confused,—no, I guess it may have been Mr. Pollock—that there was a gutter provided underneath there, which certainly indicated an understanding or an expectation that it was not always going to be perfectly watertight.

Mr. Wolf: I think from my understanding of what the witness might testify to, he is not disagreeing with that view.

• • •

[545] Q. Would you continue with your description of the disclosure in the Mackie patent, please? A. Well, shall I continue interpreting Figure 2?

Q. If you feel it has not been explained in full. A. Well, the way I interpret the operation of the wiper arm 11 is that its function is to reduce the thickness of that material

which is permeable, which is located between the layer of rubber, which is in the fabric 20, and the fin 27.

Mr. Pollock: Your Honor, I don't believe there is any discussion of it in the patent, concerning just what the fabric 20 does. I may be wrong.

• • • •

[546] Mr. Wolf: Your Honor, my offhand knowledge of the patent in this case is that it does not specifically point to a rubber fabric. I believe, perhaps the witness is referring to an actual fabric which he saw.

• • • •

Q. Well, in connection with the particular disclosure we see here would you interpret the function of the wiper arm and the fabric, the inleaning fin, without reference to whether or not there is a three-layer material, if you can do so? A. Yes. The only reason why I said "considerable pressure" between arm 11 and the strip of resilient material 27 is because in the back of my mind I was thinking of the drawings in the file wrapper of the patent. Those drawings show that there is a non-negligible pressure at least between the wiper arm 11 and the resilient material 27.

• • • •

[547] The Court: Well, he says there is something about the drawing that indicates the necessity of pressure. I will be glad to have you show him the drawing.

• • • •

The Witness: This is the page following 42. I think—

The Court: Those, of course, are not, as I remember the testimony earlier, anything except illustrations of the way that the top was presently being used by General Motors.

The Witness: I just want to justify the use of—

The Court: Go ahead. What is there about this drawing that shows considerable pressure is required?

The Witness: I believe some of the parts here were numbered. Can I refer by number?

The Court: Yes, indeed. You were speaking of the sponge, it is number 10.

The Witness: Yes.

The Court: It shows considerable pressure because the sponge is pressed out of shape?

The Witness: That's right.

[548] The Court: Does the patent itself say anything about sponges?

The Witness: Resilient material.

• • • •

The Court: He has told me something required great pressure. Either he is going to tell me things I can see for myself that are obvious, or he is going to tell me things that I can't see for myself and that are not obvious. If he is only going to tell me what is obvious, we are wasting our time. If he is going to tell me something that isn't obvious, I have to know he has qualifications to tell me.

• • • •

[549] The Witness: Maybe I can make only one more comment with regards to this pressure. In the column 8, line 14, the [550] sentence reads:

> "pressing this firmly against the in-leaning fin of the weather strip, pressing that fin outwardly as shown in both Figs. 2 and 8."

And my interpretation is that the upper surface of the fin 27 on Figure 2 was initially plane. Otherwise I just cannot see how Figure 2 shows that this fin has been pressed outwardly.

Q. Could you read the next sentence following the one you read and tell me whether that further supports your position? A. [Reading]:

> "This firmly holds the top material against the sealing weather strip 27 and provides a very good fasten-

ing means at the top of the tonneau in place of the channel type of fastener described in the preamble."

The Court: To help you out a bit, skip down further: "pressing the top material tightly against the rubber weather strip."

The Witness: So I interpret the arrangement of wiper arm 11 and the fin 27, fabric 20 in Figure 2, as being a sealing at the body line between the outside of the car and the inside of the car, and by inside of the car, I mean the passenger compartment.

Figure 2 shows one additional sealing between the outside of the car and the passenger compartment. This is the trough arrangement which collects the water in the U-shaped cross section [551] number 22. The fabric is there shown as leading water into that trough so it cannot possibly reach the inside of the car, the passenger compartment.

Q. Do you have anything further to say in connection with this? A. I was going to say that the sealing means at the belt line involved are folding bow structure, the wiper arm, the in-leaning fin 27 and the fabric and the means for guiding this. The seal at the trough involves the attachment to the trough, the fabric and the trough itself.

Q. Could you indicate whether or not these two seals that you speak of work independently or interdependently upon one another? A. I would say they are definitely two different seals, two independent seals.

Q. We refer to the file wrapper of this particular case and you saw a drawing of a cushion between the body line and the wiper arm. Could you tell us whether or not this particular arrangement, from a mechanical point of view, is the same or different from that which you see here in the Mackie patent? A. I would say mechanically the functions are achieved in the same manner. The sealing at the

trough is essentially identical and the sealing at the belt line, except for the change in position of the resilient materials, I would say that sealing is achieved in the same manner as shown in Figure 2 of the Mackie patent.

• • •

[552] The Court: I will let him go further and he can say what he saw mechanically different. Whether it is the equivalent or not—.

Q. Please indicate whether or not you saw anything mechanically different in the structure you viewed in the garage, using the defendants' 134 top on a 1953 Ford, as compared with the structure shown here in the Mackie patent or, additionally, the one you saw in the file wrapper? A. Well, in the auto, the 1953 Ford, there is an open space in [553] between the fabric 20 and the body line member which I would call—I think I would use a GM cross section to identify them. I don't have a number for the very body line.

Mr. Pollock: The belt rail.

The Witness: This one, It is the member which is touching the fabric from the outside of the car.

• • •

The Witness: Then in this model there is a space in between the fabric and the belt rail. There is not a contact of the form suggested in Figure 2 of the Mackie drawing. Certainly the water can pass that space much easier. As far as sealing, this is about what I would say.

Q. Could you indicate—I'm sorry, I missed your answer. With respect to the sealing, you say it was not the same? [554] A. If I am to compare the sealing arrangement in the Ford model presented by the defendants and the arrangement shown either in the GM structure or in Figure 2 of the Mackie patent, I just made those remarks as far as sealing is concerned.

Q. They are not the same? A. No.

Q. Could you indicate the difference? A. Well, the difference is mainly one of effectiveness in sealing. I say that there is a great difference in the ease with which water can pass the space between the fabric and the resilient member 27 in Figure 2 of the Mackie. Where this space is—I said provided by roughness of the material and the fact that it is not water-tight on its very outer surface, and if we compare this with the structure we saw downstairs, the resistence to the water is tremendously different.

• • •

[555] Q. With respect to effecting a weathertight seal at the belt rail, as disclosed in the Mackie patent, could you please indicate to the Court what elements are specifically and necessarily involved? A. I would say that the elements that are necessarily and specifically involved are the fabric and the belt rail, in the first place, the bow structure to actuate the wiper arm, in the absence of other means of actuating the wiper arm, some guiding means for the wiper arm, like the short linkage 13, and possibly this resilient material 27.

Q. You mentioned the fabric. Would you say it is or is not necessary to secure the fabric to effect this seal at the belt line?

• • •

A. No.

• • •

[557] Q. Could you please indicate to us specifically the functions [558] from your interpretation of this patent and your observations of the automobiles you have seen of this particular wiper arm? A. Well, I would say it has essentially two functions. The main function I can see in the wiper arm is that of distributing pressure on the fabric 20 against the belt rail so as to effect some sealing at the belt rail. The resilient strip 27, I fully agree, it is

made to take on some manufacturing errors. It is very understandable that it is very difficult to shape a belt rail to conform exactly in a compatible geometry with the wiper arm 11, and it is useful to put some kind of member capable of distributing the pressure uniformly on the fabric.

The other function I see in the wiper arm is one of preventing the inward motion of the fabric 20, and I would say this function is essentially that of all other bows of the structure, of any convertible top.

* * * *

[560] Q. Mr. Brosens, at the end of Friday's session, you were about to discuss the prior art which you have classified in a book entitled "Prior References", which is now of record in this case. Will you describe to the Court the constructions which are referred to in those particular patents, commencing with the Bessonneau patent 2,185,581? A. The Bessonneau patent refers to a hood construction in general for motor vehicles and describes the folding bow mechanism, including an arrangement for sealing at the rear quarter. I believe that Fig. 1 is the most essential thing to look at first. The fabric which is—I don't believe it is numbered.

* * *

[An easel is produced holding three charts, and the witness leaves the stand and goes to the easel.]

* * *

[561] The Court: The fabric seems to be 13.

* * *

The Witness: 13. I would describe, first, the way the rear edge of the fabric is cut. It is cut essentially following the line from 32-33 to the rear. The fabric is attached at the front of the rear quarter to one of the bows, 32, I believe. The fabric essentially between the numbers 33 and 72 in this area is loose, then it is attached to the tilt

hoop, which is No. 2, which I color in full brown [marking].

[562] The Witness: Right. And the linkage system is the linkage which connects the tilt hoop to the crank 15, and the crank 16, which I mark with brown marks [marking]. The fabric is attached to the tilt hoop numbered 2. The tilt hoop 2 is the shape of a "U", and the figure 2 of the same patent in this part has been colored with light red or pink, indicating that the tilt hoop was a continuation on this drawing in the same manner as the one shown in the figure.

Q. You have indicated that continuation of Fig. 2 in brown; is that correct? A. That is right. The four bar linkage that you see here is connected to the structure here; that means the element numbered 20, which I am also coloring with the brown color. In the raised position this tilt hoop numbered 2 bears against in Fig. 1, the rear edge of the car numbered 3. This "U" bears in the same fashion against Fig. 1. This is shown in Fig. 2 where it goes from the edge of the car; and there can be observed an overlapping of tilt hoop 2. That means in Fig. 1 there is pressure in addition along that line.

[563] The sides of the U which I here call by S are not shown under the frame of the body of the car in the same manner. The sides of the U are essentially in sliding contact with the sides of the car. This has been called scissors action.

The Witness: The motion is essentially, on the sides, it is essentially in a vertical plane with respect to the car standing upright. The tilt hoop is sliding up and down practically perpendicular to the ground. Figure 3 shows the hood of the car being lowered and it essentially shows the way the tilt hoop detaches from the body line to start to make a descending motion in the car.

The end position of this tilt hoop is shown in the figure, in the patent, it is the Figure 4, and apparently I can draw it approximately in this Figure 3 by this shadowed area.

Q. You drew an arrow. Can you indicate the purpose of the arrow? A. It essentially describes the motion of the tilt hoop as it descends into the body.

Q. Can you decide the connection of the tilt hoop to the folding bows? [564] A. Well, there is a single connection which is the link number 20 which connects an unnumbered pin, we will call it just a pin, to the main activating mechanism of the bow structure, which is about a third of a gear and numbered 21.

The links 15 and 16 are essentially guiding means for the motion of the tilt hoop and 20 is essentially the action from the bow structure.

* * *

Q. In connection with this patent, will you please describe how the hoop 2 acts in cooperation with the folding bow mechanism.

The Court: He said it did.

* * *

[565] A. The gear is essentially a mode of transmission between the motor to the folding bow structure. The gear is rigidly attached to the frame 32 of the folding bow structure so that when the gear is operated—

Q. Which gear are you referring to? A. I am referring to the set 2, 21, and 21 being the one rigidly connected to the frame, 30, 32.

* * *

Q. This particular top, can this particular top be operated from the inside of the car without the necessity of getting out to fasten or unfasten portions of the fabric? A. It can be operated without leaving the driver's seat.

Q. Is this indicated in the specifications? A. Yes.

Q. Could you indicate what type of closure is formed be-

tween the fabric and the body line of the car in the rear quarter?

[566] Mr. Pollock: Your Honor, may it please the Court, this witness is apparently testifying about this patent. I would much prefer that when questions such as this are asked, he actually refer to the patent so that we can see what he is basing his statement upon. This is a very complex patent, your Honor.

The Court: I can see that. I would like to ask him a question. What happens to any water that gets down?

The Witness: Water may get into, may pass the fabric at the body line in two main areas. One is the rear belt line where the trough 77 is solidary with the hoop 2.

The Court: What about on the quarter?

The Witness: And under the quarter, the water will run parallel to the side of the car into two collecting troughs numbered 79 and 80, which will be filled in with brown in Figure 1.

The Court: What is the course of the water? How does it get there?

The Witness: Well, these troughs are attached to the side panel at the rear quarter so that the water which follows essentially with the plane of the side panel—

The Court: If it does.

The Witness: —would reach the trough.

The Court: There is nothing to guide it, I take it.

The Witness: There is no fabric to guide it.

[567] The Court: Or anything else to guide it.

The Witness: Well, to some extent there is a gravity force which will determine the motion of the water.

The Court: That depends on the shape of the tonneau, doesn't it?

The Witness: Yes, and the mount by which the trough is positioned into the car so as to be right below the body line.

[568] Mr. Pollock: May it please the Court, I believe this response typifies what I was objecting to previously. I believe this Court will find, later on at least, there is no description in this patent as to where the fabric is attached nor any mention of tension.

The Court: Even if it were, I don't see what you would accomplish. I hope, for the defendant's sake, he has a better patent than this.

Mr. Wolf: Your Honor, I believe

The Court: It is very complicated and I would think, inefficient.

[575] The Court: Well, what do you say to Mr. Pollock's suggestion, that the witness is drawing on his imagination, not on the specifications of the patent?

[576] Mr. Wolf: And I don't think this particular patent was very well drawn. I wish I had had a chance to draw it.

[582] A. In my interpretation, the fabric is also attached to [583] the sliding members, 30 and 32 and these provide some tension at the body line and rear quarter in general.

This next Figure 3 also shows that the fabric is attached to the sliding members 30, 32 or 30, 31, because it is shown in tension between the members 6 and 5 and I would expect the fabric to slide over the point of attachment of these sliding members 30 and 32, if it were not attached.

[584] A. I would expect it is just a closure resulting from bringing the tilt hoop 2 into a small space with the rest of the body structure.

You can, if you make the two sizes equal, you would have

just about the sliding contact, you could fit a tilt hoop 2 slightly larger and get some kind of spring action against the body line of the car in that area.

[585] The Witness: Well, if I make an enlargement on this according to what I interpret—

Mr. Pollock: Again, you are assuming that is the way it is.

The Witness: If I did not make this assumption, I would not think this is a strong attachment.

Q. Would this be a conventional type of attachment, from a mechanical engineering point of view? A. It is one of many possibilities.

[586] Mr. Pollock: I object, your Honor. This appears to be a question that the witness make an invention in order to anticipate the invention here in suit.

Mr. Wolf: Quite the contrary. I am merely asking to show what type modifications you must have to come closer to the Mackie structure.

[587] Mr. Wolf: Actually I have in mind continuing the beveled edge.

The Court: All the way around.

Mr. Wolf: It would not have to go that far, your Honor.

The Court: It is one of the big troubles with that patent.

Mr. Wolf: No, I don't think so.

The Court: I disagree with you. It seems to me this patent solves nothing so far as our present problem is concerned, the sensitive area is that area which is directly forward of hoop 2.

[588] The purpose of this is obviously to obtain—I never heard the word before, maybe I misuse it—it seems to me the purpose of this patent or one of the principal purposes is to obtain a disappearing or torpedo type top—

Mr. Wolf: I am sorry, your Honor.

The Court: —which will disappear, it isn't aimed, as I can see, to keep water in any substantial quantities out of the inside of the car, you don't need to have all this complicated tilting up, for the purposes we are interested in this present patent, it serves an entirely different purpose or is intended to, namely, lowering the top down a very substantial distance.

* * *

[591] The Witness: The lower end of the fabric at the belt line would be attached to the member 2 and would lower it to the space here.

The Court: In other words, the fabric is to be permanently attached all the way along the line to this extended tube that runs all the way forward?

* * *

[592] The Court: As the top goes up and down when there is a relative change between the various bows, now taken care of by a pucker. Perhaps I should have said changes in shape. My terminology isn't good. The shape of the frame.

The Witness: Well, that's another problem.

The Court: That's another problem, too?

The Witness: Yes.

* * *

A. The additional problem is, that the front end of 2 would separate from the point of attachment with 30-32, so that there would be a ripping action at this point.

* * *

[604] [Offset prints marked Exhibit JJ-1 through 4.]

Mr. Wolf: Your Honor, I would also like to offer the

drawings which appear in Figures 1, 2, and 3, the enlargement on the board.

The Court: All right.

[Drawings marked Exhibit KK.]

[Chart marked Exhibit LL.]

Mr. Wolf: Your Honor, I would also like to offer the model which we have discussed, as an exhibit.

The Court: As a chaik, yes.

[Chalk marked Exhibit MM.]

* * *

[605] Mr. Pollock: It is my view, your Honor, that these are merely photographs and do not represent the models in good light, and I would much prefer if anything goes in that the model go in.

The Court: The model is in.

Mr. Pollock: The model is in?

The Court: Yes.

Mr. Pollock: Then I see no purpose in offering the photographs, and I object to them.

The Court: The only possible purpose would be they would go in the paper record. I don't care. I won't take them over your objection.

Mr. Pollock: I object to them, your Honor.

Mr. Wolf: Your Honor, note my exception. These photographs show the condition of the model and are useful in the paper record, as your Honor indicated, and without them there [606] would be no way of demonstrating in the paper record the model to which the witness has referred.

The Court: I stand on my ruling.

Mr. Wolf: Your Honor, I would like to call your attention to the fact that a second reference in this group of primary references of the Bessonneau 2479599, this particular patent is a division of the patent which was just discussed as indicated within the Patent Office.

The Court: Yes.

Mr. Wolf: And for that reason we will not discuss it, but it was included merely to keep the record straight.

I should like the witness to turn to Patent 2157783, also issued to Maurice Bessonneau.

Q. Will you describe to the Court the construction therein involved. We have a four-time enlargement of Figs. 1, 2, 3, to which you may refer and thereby indicate to the Court in describing the construction [handing]. A. Well, the essential features in this construction appear in drawing form in the first page of the patent. Those are Figs. 1, 2, and 3. We have a folding bow structure which from the middle of the body toward the front looks very similar to the folding bow structure of the previous Bessonneau patent 2185581. The rear quarter of this folding bow structure is somewhat different from the one shown in 2185581. It involves three bows, 71, 74, and 60, which are pivotally mounted on a link 62 which [607] is actuated by a gear similar to that in the previous patent but positioned differently. The rear quarter of the fabric is attached to bow 71 and to bow 60. 60, again, has the form of a "U" which follows the contour of the body line, and in the raised position this member 60 bears against the entire contour of the well at the body line.

Q. Now, to keep this in proper chronology, I notice in the drawings there is not the same type of body line as defined at 3 in the prior Bessonneau patent. Could you indicate on this enlargement where this body line occurs? Would you indicate it with an arrow and the letter "L"? A. You mean the body line against which member 60 is?

Q. Yes. [Witness marks.] Will you continue on?

* * *

Q. Will you indicate in the patent where you find support for this conclusion? A. On page 3, in the left-hand column,

line 36, reads as follows: "The rear frame of the hood comprises—"

* * * *

[608] The Witness: Line 36:

"The rear frame of the hood comprises a hood"—

It should be a "hoop"—

> '60 on which is fixed a rear end of the cloth 8, and is intended to be pressed in the position of use against the outer edge of the housing 5 and to penetrate into said housing when the hood is folded."

Now, I have drawn the body line, and I have labeled the body line with the mark "L"; so that this statement—

The Court: As far as I can see, that statement would be accurate if it were 6 inches below the body line.

The Witness: Yes, it would. All I want to say is, that the body line must be above the upper surface of the hoop 60.

The Court: In other words, the body line is either "L" or higher than "L"?

The Witness: That is right.

The Court: All right. I agree with that.

A. [Continuing] The attachment of the fabric to the hoop 71 is described in a paragraph in the same column on page 3, which starts at line 50.

The Court: Yes, I have read it.

A. [Continuing] And it is also shown in 62. Again, the cloth [609] is not shown as detaching from member 71 like Bessonneau drew in Fig. 3 of the previous patent, at the body line. It doesn't show any wrinkles. Now here we have the member 60 which is pivotally connected to a crank 62.

Q. Are you referring to Fig. 2? Would you indicate it? A. I would refer to Fig. 1. And the crank 62 is solidarily attached by pin 63 to the frame of the car and actuated by the lever 66.

At the other end of the hoop 60, that is, at the rear edge, Bessonneau has used the fabric itself as a guiding means. This is described again on page 3, in the left-hand column, starting line 58:

> "The pull exerted on the strips of fabric connecting the hoops to each other in the usual manner as known causes the displacement of the rear portion of the hoop."

So 8 is essentially a guiding means for the rear end of the hoop 60. When lowering, the gear controls mainly the member 10 in Fig. 1, which is in turn attached to the pillar 9; and as the gear moves clockwise, the pillar 9 releases essentially the fabric at the rear quarter and allows the bows 71, 74, and 60 to move clockwise likewise. It is essentially the full weight of the bow 60 and 74 which causes the clockwise motion of all three bows, 71, 74, and 60. 71 is pulled clockwise again by the fabric tension, and as soon as it reaches the position where [610] gravity leads it into the well, the fabric does not need to keep pulling on it, as shown in Fig. 2. There is no more tension from fabric 8 on 71; but 71 is now positioned so its own weight helps it fall down.

The hoop 60 reaches its bottom position by merely resting on the bottom of the well. This is, again, my interpretation of it because the rear end of hoop 60, being only held by the cloth it should pull unless another object came to act on it as as to limit its fall, and I imagine the bottom of the well would be this third object.

Now, this time the hoop 60 really follows the entire contour of the well opening and presses against the entire contour of the well opening, as read on page 3. This is again line 36.

* * *

[613] Q. Does this construction operate automatically? A. Yes. The mechanism takes care of itself, the lowering

of the fabric into its final position in the well, is automatic.

Q. I refer you, for example, to Page 2, Column 1, Lines 33 and following. A. Yes, the rear frame is described as adapted to be folded automatically, responsive to the mechanical control in the construction.

* * *

[615] The Court: I was saying that the upward force of 61 alone isn't going to distribute itself very much, the pressure is going to come from your material most entirely.

Q. Would you agree with the Court's conclusion on that?

The Court: I am speaking of the rear portion.

The Witness: You mean essentially what we have described as the bottom of the U?

The Court: I am speaking of the back of the car, the rear end, the extreme right-hand portion of Figure 1.

The Witness: That is exactly, perfectly correct, yes, sir.

* * *

[616] The Court: Is it not a fact that the pressure in the Mackie patent is derived directly from the linkage of both ends of the wiper arm and does not depend upon the strength of the material and tension of the material that it has?

The Witness: Yes, it depends, the dependence of your pressing is now in the linkage and tension of the fabric.

* * *

The Court: I don't see, unless the witness's previous answer was incorrect, in which he agreed with me, it may be involuntarily, I don't see that they are comparable.

* * *

[621] Q. How would you modify this construction to include within it the following elements operating in a manner such as shown in Mackie: (1) the folding bow mechanism?

* * *

Q. (1) the folding bow mechanism; (2) a member adapted to pressure the fabric against the body of the car; (3) a fabric which would come within the well of the car and be secured to the outside; (4) a trough which would carry seepage which might pass between the fabric and the body of the car from the interior of the car.

• • •

The Witness: Well, to start I would think the same kind of demonstration we did with the model on the previous Bessonneau patent would just repeat itself here. In other [622] words, we could extend the fabric instead of attaching it to 60, we can very well extend it into the well and attach it there to a trough.

• • •

The Court: Would it not be the fact that as soon as you did that, you would lose all of the upward effects of producing the pressure of the 60 and what comes in this particular patent as the rear almost entirely from the fabric?

The Witness: That is right, one of the things I would do is replace the fabric action by a link at the rear end of the 60. I would have to have a mechanical guiding means to replace the action of the fabric at the rear of 60.

• • •

A. It could be the same kind of linkage as 16 but maybe positioned in a different manner.

Q. All right. Could you then— A. Except for very minor problems of clearance, I think you could attach the fabric to the side panels almost at any height.

The Court: Excuse me a minute, I am still intrigued about the facility with which you reach this result.

• • •

[627] Q. I believe you testified as to what you do with your fabric, did you not? A. Yes, I said it would be extended almost by any amount in the body well and attached

to a trough. The only consideration which would dictate the amount by which I would lower the point of attachment would be one of clearances. I might find I like to provide sufficient space between the downward moving bows and the trough. This may be difficult to accomplish relative to the belt line, depending on the model of the car, the way the side panel is shaped.

• • •

[628] Mr. Wolf: Your Honor, I would like the witness to indicate in general the facility with which a gutter could be [629] incorporated into this particular structure. After all, we have to show your Honor there is no novelty in the arrangements which Mackie has suggested. The mere fact that the Bessonneau patent we are now talking about doesn't happen to show a gutter is not of course indicative that it was not suggested by others.

• • •

A. Well, this would be, I think, a simpler problem than the one in the previous Bessoneau patent, because in the previous Bessoneau patent you have to worry that the trough be located under the point of leakage so that gravity would direct the water into it. In this case now the fabric provided means of guiding the water in the trough so that the trough should be attached right next to the body panel.

The Court: If you extend the fabric down?

• • •

[630] The Court: In other words, if you do what Mackie and Duluk did, then you could do what Mackie and Duluk did—as I understand it. Is that what you're telling me?

Mr. Wolf: I believe, your Honor, that is what we are saying. We, in effect, are saying this is merely a combination which is perfectly obvious.

• • •

[631] AFTERNOON SESSION

Q. [By Mr. Wolf] Before we go into the next patent, I would like to refer you once more to the last Bessonneau patent with which we were concerned.

I believe I failed to ask you to point out the similarities of function between the arm 60 in this particular patent and the wiper arm of the Mackie patent. A. Well, when we covered the Mackie patent we pointed out that the wiper arm 10 had essentially two functions; one of pressing the fabric against the body line to effect a seal at the body line and the other to prevent the inward motion of the fabric. This is accomplished by member 60 equally as well in the Bessonneau Patent 2,157,783.

Q. You were downstairs, I take it, when we had the demonstrations in the garage? A. Yes.

Mr. Pollock: Which demonstrations are we speaking of?

Mr. Wolf: The demonstrations conducted by the defendants.

Q. Do you recall seeing a test conducted in which the fabric of the 1953 Ford was secured to the wiper arm by a paper clip? A. Yes, I do.

Q. Could you in any way correlate that particular demonstration with this particular reference? [632] A. Well, it is going to the Mackie patent, I had described the seal in the belt line as independent from the seal provided by the trough 22.

I think this is very well pointed out by that experiment where the seal we obtained in the belt line is essentially the same whether the fabric extends down to the trough or not and the actual structure we achieved by wrapping the fabric around the wiper arm on this Ford model, I think looks very closely like the actual seal achieved by the member 60 in this Bessonneau 2,157,783.

[633] Q. Will you please now go on to the next reference, which is British Patent 447,641. I believe we have a blow-up of that also. Would this be of any help?

Mr. Wolf: Before you describe it, I would like to offer this blow-up in evidence. It does contains some markings. I offer the blow-up of Bessonneau Patent 2,157,783, to which the witness has previously referred.

[Blow-up of Bessonneau Patent 2,157,783 marked Exhibit NN.]

The Court: What is the British patent number?

Mr. Wolf: British Patent 447,641.

[634] The Court: That again is Bessonneau?

Mr. Wolf: Yes, your Honor.

Q. Could you describe the operation of this particular construction? A. Figure 1 of this patent shows that again the forward end of the folding bow structure is essentially similar to the previous Bessonneau structures.

The rear end, that is, looking from the member 1A backwards, is quite different from the previous Bessonneau structures, in that the fabric now is secured inside of the well of the body.

The securing is shown at 26 in the cross-sectional view, Figure 1, and also by referring to Figure 3. It may be noticed that that attachment is contained along the sides of the well.

* * *

Mr. Pollock: If the witness is to testify at this point I request he specifically identify what part of the patent he is referring to.

The Witness: I am referring to the drawings, for instance, Figure 1 starting at 26, which is the edge of the fabric. We see a dotted line which follows behind the seat in the car.

[635] Q. Would you indicate right on the disclosure here the word "seat" with reference to it? A. The dotted line

continues after, past the seat and extends all the way to the member 1, as a continuous straight line, which is a direct prolongation of the dotted line.

* * *

Q. Would you indicate the dotted line the Court has referred to by writing "body line" with a lead arrow to it? Now would you indicate— A. I would like to point out that this is the body line. By examining Figure 3, when the member 1 starts its motion rearwards [636] the body line appears as a full line in front of the member 1 and that line could not possibly mean the fabric because there would have to be a continuation of the contour of the fabric.

The Court: You say that dotted line shows that the fabric is fastened to this horizontal member?

The Witness: It shows that the fabric overlaps the body line and projects into the well of the car.

Then I look for the end of the fabric, the edge of the fabric into the body well and I see that the lower edge is that continuation of the dotted line behind the seat because this line stops at the member 1 where the fabric is attached.

Q. Would you indicate what you consider to be the lower edge of the fabric? A. It is indicated in the drawings.

* * *

[637] The Witness: Well, I would expect that the lower edge, if you did not have it fastened, you see a wrinkling of this straight line, as the fabric loosens, I would not expect the edge of the fabric to remain straight when the entire top becomes loose by lowering the top in Figure 3.

Q. Do you find any indication on the specifications which indicates the securing means used for this fabric? A. Yes, I found at Page 2, Line 19, it refers to the other end of the canvas that is attached at 26 to a small cross piece within a space provided for the folded hood at the rear of the vehicle and then on Page 3, Line 37, it says at the

end of Line 38, the end of the canvas is fixed within the space provided for the folded hood in the rear of the vehicle body.

The Court: All that means is you have passed the point 26, isn't it? How does either of those references indicate that it is attached to 26 forward horizontally?

The Witness: Well, if we take the second one, the second one is not specific about the attachment.

The Court: Is the first one?

[638] The Witness: The first one is specific, the 26.

The Court: Oh, yes, but I am asking you where you draw the conclusion beginning on 26 and running forward, it is attached.

The Witness: I would not draw the conclusion from those statements.

The Court: I thought that was what you said.

The Witness: I understood the question to be where in the specifications they were mentioned, the attachment of the fabric.

Q. Do you find any further language indicating securing the fabric below the body line? A. Not offhand. I think I remember some mention.

Q. Do you find any indication which would indicate this construction is automatic in nature? A. Yes, in the description on Page 2, starting at Line 33, Mr. Bessonneau discusses the case where there is no mechanical control and describes the sequence of manual operations that are necessary to raise and lower the top. Then starting Line 51, he says,

> "However, it is feasible to employ for the said flaps, as well as for the hoop 1, various mechanical controls either combinate or separate. The drawings show diagrammatically by way of example, a control for the movement of [639] the principal hoop 1 by means of an electric motor."

And further the description given from Line 33 on, it can be seen that the activation of the hoop 1 is the only requirement for a completely automatic operation, leaving out the flaps.

Q. I would like to go into a little more detail your interpretation from the mechanical standpoint of the disclosure shown in Figures 1 and 3.

If, for example, the fabric were not attached, say, to the member 1, or down below, what position would the forward edge of the fabric take in Figure 3? By the "forward edge of the fabric" I mean the forward edge of the rear quarter? A. Well, I would expect to see a loose edge overlapping or standing past above number 1 and from number 1 I would expect to see a loose edge there.

* * *

[640] The Court: I have heard no testimony from you indicating why you thought it was attached to 1-A. I thought you had it attached to this arm here, which has a number 5-A.

The Witness: This here.

The Court: The lower edge.

The Witness: 5-A.

The Court: Call that 5-A. The testimony you gave with relation to the dotted line, I understood you to indicate it was attached to 5-A, not that it was attached to number 1.

The Witness: No, I spoke of two dotted lines. One is one that fastens behind the seat and one is at the bottom.

The Court: How do either of those dotted lines [641] indicate the attachment to 1-A.

The Witness: Not at that time, I was speaking of one—

The Court: Where do you find there was any showing there was any attachment to 1-A.

The Witness: I don't.

* * *

[642] The Witness: 20 is a mistake. I confused it with [643] the label for—

The Court: I caused the confusion. I was referring to 20 as being—

The Witness: This is a cross section.

The Court: It really isn't 20, but it is a cross section right above 20. Do you not observe a complete space between that cross section and the top? And is that not even more obvious over at 9?

The Witness: Let's see.

The Court: I don't want any more testimony based on speculation—this drawing is perfect—because it appears to contradict what the witness has stated. What the witness might have said might well be correct—I don't know; but it indicates the futility of the examination based on the assumption that this is such a perfect and complete drawing.

* * *

[648] The Court: And I might add that I have sometimes given some thought to what I said sometime last week as to how far this witness' qualifications go as an actual matter of construction.

* * *

[652] A. There would be some special arrangement which would have to be done if you wanted to maintain the space between the fabric and seat, or you could increase the space or do away with the bottom of the U, of course, and attach fabric at the rear of the belt rail for the rear edge, the side quarters could accommodate bow 2.

Q. You said you could do away with the bottom of the U, such as shown in the first Bessonneau patent.

Mr. Pollock: Objection, your Honor. He said he would have to, he did not say he could.

Q. Did you say you have to or you could? A. I mentioned it as one of three possible alternatives.

[654] [Enlargement of British Patent 447,641 marked Defendants' Exhibit OO.]

Q. Would you turn, please, to the next reference which is Ackermans.

Q. Well, the Ackermans patent again, like the Bessonneau patents, covers a folding pillar structure and detail in addition to describing means for sealing at the rear quarter. Actually in the Ackermans patent figures 9 and 10, they are probably the only ones which are relevant here. Figures 9 and 10 show how the seal is effected between solidary attachment at the belt rail 120 and the pin 23 of the folding pillar.

The way the seal is obtained here is by effecting a tension between the end of the belt rail 120, which I think is 132, and the folding pillar 32, by tensioning the fabric between those two points, the fabric can be made to become adjacent to the inside panel 128, in Figure 10. There is a pressure accomplished between the strip 128 and the edge of the body at 121 which effects a seal.

[655] The Court: What creates the pressure?

The Witness: The tension between the folding pillar 22 and the attachment at 132.

The Court: In other words, there would be a loss if the fabric were to stretch, for instance?

The Witness: You mean if it lost its stretch, yes, the seal would be lost there.

In addition the sealing means the fabric 126 extends far enough below the body line so that water passing that seal at 128 can be directed into the trough 124 as shown in Figure 10.

Q. Would you indicate on this enlargement the portion of the fabric which extends below the body line of Figure 9? A. In Figure 9 the portion of the fabric is labeled 130, I believe; here is the brown marker again.

Q. You apparently indicate that portion that extends below the body line in brown patch lines? A. That is right, shaded brown.

Q. What is the purpose of not securing this fabric below the body line?

Mr. Pollock: I believe it has been clearly testified it isn't, although I agree it is the case.

The Court: All right, let's assume it then.

Mr. Wolf: I think it is fairly clear, your Honor.

A. Well, in this Ackermans construction the hinge 24 is close to the belt line and if we had a permanent attachment along the [656] lower edge of the fabric of flap 130, it is conceivable that in folding the pillar 22 you would rip at least the forward end of the flap 130 from its attachment at the lower edge.

This would not really be the case if you had an attachment lower—I mean if the pin 24 were placed lower. You lower the position of pin 24, then.

Well, if you want to secure permanently the flap 130, you can do so by prolongating the flap lower, closer to the trough 124. This I think would be sufficient to allow for a permanent attachment at the lower edge of the flap 130.

The Court: Without ripping?

The Witness: Without ripping the fabric from the attachment.

Q. Apparently then it would be a question of degree and as to how far down you had to bring it to effect this securing, is that correct? A. Yes.

* * *

Q. Are there any other features you would like to point out about Ackermans reference? A. Well, the one feature is that it shows how you can separate [657] the different areas of the fabric, namely, the rear quarter from the rear edge, you can attach the rear edge to 120 permanently and use flap means like flap 130 to effect a closure between

the remaining edge of the fabric at the rear of the fabric. Bessonneau shows, all the Bessonneaus we have seen do not show the fabric attached at the belt rail along the rear edge.

Q. Is this device automatic in operation? A. Yes, it is. This is pointed out.

Q. Does this construction effect a juncture and closure at the rear quarter along the sides? A. Yes, there is, by means of two independent seals, 128, 121, and Figure 10 at the belt line and the catching of seeping water into the trough 124.

* * *

[658] Q. Do you find any language in the Ackermans patent which indicates that no snap fasteners are required in the operation of this construction? A. Well, the answer is, Yes, I found such indication.

[659] Q. I refer you to columns 1 and 2, at the bottom of column 1. Is that the reference you referred to? A. That is right. [Reading]:

> "A further object of the invention is to provide an improved separable juncture between the top fabric and its lower forward portion and inside of the body at the belt line whereby no snap fasteners are required on the outside of the body to insure a tight weather-proof joint."

Mr. Wolf: I would also call the Court's attention to the paragraph that immediately follows that, your Honor, as having some bearing on this structure.

* * *

Mr. Wolf: Beginning with line 4, your Honor, in column 2.

* * *

The Court: All right. We'll take a short recess; and after the recess, Mr. Pollock, I think it might be well if you [660] would state for the record the points in which

you claim Mackie and Duluk constitute invention over Ackermans.

. . . .

Mr. Pollock: As I understand the Court, you wish me to comment on Ackermans?

The Court: Yes.

. . . .

The Court: Wasn't there something in the stipulation to the effect that Ackermans could be considered, however?

Mr. Pollock: Yes, your Honor; yes, your Honor. That isn't the point in making this comment, your Honor.

I invite the Court's attention, however, to a First Circuit case which will have some bearing on my consideration of things here. The case is Dengrio v. Commercial Consolidated Coal Corporation, at 23 Fed.(2d) 384, 385. This case—and I will read a brief quote from it—states that the fact it was co-pending so long with Brockman in the Patent Office—they are speaking of two cases, two co-pending applications—the fact it was co-pending so long with Brockman in the Patent Office and no interference declared on the extracting clauses, creates a strong presumption that Brockman in this process had a patentable [661] novelty.

There was also similar law at 69 Corpus Juris Secundum, at page 595, where it states: Likewise the fact that it alleged an anticipating patent was pending in the Patent Office at the Patent Office at the same time as the patent in suit and that no interference had been declared between them, is strong evidence of patentable novelty. And to the same effect there is a series of other cases which we can brief for the Court's benefit.

The first point I make, therefore, is that there is at least a presumption that these patents which were both being examined at the same time were considered by the Patent Office in the light of their respective disclosures.

There is no question, however, that no interference was ever declared between them; and this procedural matter in the Patent Office of itself raises a presumption that Mackie-Duluk is patentable over Ackermans.

Now, getting into the structure—Would you wish me to discuss that point further?

Mr. Pollock: Getting into the structure, we find there are a number of structural distinctions between Ackermans and Mackie-Duluk. The first is that Ackermans never had a flap which extended down far enough to attach to this part. And we will show during rebuttal that Ackermans was a man of some experience in this field and yet his patent never recognized [662] any structure where the fabric could be permanently fastened to the inside of the car, to the rear quarter.

• • •

Mr. Pollock: As a result of this non-attachment Ackermans conceived that his seal, if you will, is formed by the closure of the fabric. This Court recognized, however, that this fabric has changed, and as a result of that we find that the seal, or at least we contend that the seal would be lost within a very short time.

I further invite the Court's attention to the fact that we had an ex parte demonstration where the fabric was actually attached to the trough but the wiper around it was removed; and this Court will recall, I believe it was in 1953 or '4, without undue force being applied to the fabric the top material was permitted to be pushed into the body by a matter of an inch and three-quarters or thereabouts.

It is our contention that under actual operating conditions the Ackermans patent would be subject to this precise effect; that wind forces alone would force the fabric into such a point that all of the water passing the seal at that point would [663] be directed outside of the trough, or at

least the major portion of it would be, and could result in water damage.

Therefore we say, first of all, that there is the important distinction that in Mackie-Duluk the fabric extends down into the trough and is permanently attached to it so that any water passing the belt line is directed into the trough. Ackermans does not teach that structure and has no suggestion that such a structure could be provided. As a matter of fact, as the witness has testified, if the fabric were attached to be permanently fastened to the inside of the car, the first time you tried lowering the top it would rip loose.

I will further note that in the Mackie-Duluk structure there is what we call a wiper arm. This wiper arm exerts pressure on the fabric or at least restricts the inward movement of the fabric. This becomes very important under actual operating conditions since this of itself prevents the top material at the rear quarter from being inside or from flapping about, due to wind forces or other forces which might be applied. In that regard I also note that such other forces might occur in the case of ice or snow piling up adjacent to the rear quarter; and it is our contention in Ackermans the building up of such forces would perforce force the fabric in to the point where there would be nothing to prevent snow or ice or water from reaching water damageable proportions.

I should also like to note that from a purely abstract [664] point of view the Ackermans patent has never been adopted commercially. This structure has never appeared on any commercial automobile that we know of. In distinction to this, however, the Mackie-Duluk patent was readily accepted by the industry and was adopted on a number of cars, particularly in '52 and '54 Fords, and '52 and '53 General Motors cars, and found great success in the industry.

We believe, therefore, that the presumption which arises from the fact that no interference has been declared, the further presumption which arises by reason of the commercial success exhibited by the Mackie-Duluk structure as opposed to no commercial success of Ackermans, and the fact that there are structural distinctions relative to where the fabric goes, how it is attached, whether it cooperates with the wiper arm—all of these not only show a structural distinction between the patents but a patent structural distinction.

The Court: Thank you.

Mr. Wolf, I don't want to be unfair to you. Do you have any comment you wish to make at this time while it is in this particular frame? I will be happy to hear it. You don't have to say anything, but I want you to have an opportunity if you wish.

* * *

[665] Mr. Wolf: There is only one point I would like to make, and that is something that was particularly obvious. That was the point that Ackermans patent is not a commercial structure. I would merely like to point out, your Honor, first, there is a stipulation with regard to the date of Ackermans patent; secondly, we have prepared some exhibits to identify the original installations that show the Ackermans patent number. So to that extent I would like to point out, your Honor, that Ackermans, if it wasn't an actual installation, at least some people conceived it as such.

Q. Would you please turn to the Best patent, and would you indicate the structure disclosed there?

The Court: 173?

Mr. Wolf: Yes, your Honor.

A. The structure shown by Best and commencing with 63 and 64, is one where a fabric is used to cover the body by means of sliding bows instead of folding bows; and

Fig. 4 shows that the rear edge of the fabric is permanently secured by fasteners numbered 25 in Fig. 4.

The Court: I'm sorry, but I haven't found it. Oh, yes, [666] I have it. I see 63.

* * *

A. Now the fastener 25 actually is at that point shown in Fig. 3 fastening the fabric and also the strip 43. The description of Fig. 3 is on page 2, the left-hand column, line 59. The paragraph describes that the space in between the bows is maintained by web straps 43 suitably secured as by rivets 44 to each of the transverse ribs 33 and to a forward transverse top header 46 as at 47, and secured at their opposite ends, with the rear edge of the top fabric 18, to the rear deck of the body adjacent the top well 28, as in 25. So, these web straps 43 are all secured at the rear edge of the body. And in this manner there appears to be a mistake in the drawing of Fig. 3. The web straps 43—

The Court: Don't go down.

The Witness: Pardon me?

The Court: They don't go down to the bottom.

The Witness: No. They should just reach the body line, and actually they reach it and pass it.

Q. Would you indicate on this enlargement the correction which you believe should be made in the drawing Fig. 3? A. Well, going to Fig. 4, the body line is clearly indicated about the provisions for screws number 50a and a continuation of the upper edge of the body, and this continuation is practically a straight line until it reaches the back of the rear seat; so, [667] in Fig. 3 actually the body line should appear as a continuation of the door upper edge and similarly behind the seat.

Q. In Fig. 4 it shows a curve upwardly? A. Yes. I am assuming the upper contour is essentially the same.

Q. Wouldn't the body line then continue across from the

point I'm now indicating to this point? A. Yes. This would be at the middle of the car. The cross section shown here is practically taken at the very center of the car, and therefore 25 is probably the highest point of the tonneau at the rear edge.

Q. Would you look at Fig. 1, I believe it is, which seems to me, looking at it from that point of view there may not be any—there may be a perfectly flat surface at the top, or is there a bow? A. Well, the way I see it, there is a curvature of the tonneau behind the rear seats so that the point labeled 25 in Fig. 3 is actually the highest and the tonneau descends over the sides of the car slowly, and that is what explains this here.

Q. You drew a body line in blue ink just now. Would that not be dotted? Wouldn't the fabric be in front of it? A. That's right.

Q. In other words, you could not actually see the line you just drew? A. I would see it as a dotted line in conventional drawing practice, and I [668] would see the web strap 43 attached at this point which I have just labeled "p" in a manner similar to the way it is attached at 25 in Fig. 3.

Q. Now that apparently has a portion of this that does not go to the side quarter, and only a portion goes below the body line. Could you indicate in cross section the portion that does go below the body line? A. You cannot have any fabric rearwards of point "e" go below the body line because the fabric behind is attached on the body line as shown in 25. In front of "p", actually any shape which joins "p" with the rest of the flap shown in Fig. 3 would be possible. As a matter of common sense I would assume this contour as in most cars. Right at point "p" the flap that extends into the well starts doing so right after the fastening at "p".

Q. You have drawn an angular line? A. Yes.

Q. What would you call it? A. I would call it the corrected edge.

Q. All right. Now I notice there are circles indicated at 59. Will you tell us what those circles indicate? A. At 59 these are detachable screws which the driver cannot take care of when the top is ready to lower and he can do it from the inside of the car.

The Court: Are those comparable to Dot fasteners?

The Witness: I think that Best shows them as coarse [669] threaded screws so a couple of turns would fasten them. They could be snap fasteners just as well.

* * *

[670] Q. I am now showing you an enlargement of Figure 10 of this patent. Will you indicate to the Court where this cross-section is taken? A. The cross-section is taken at the very first screw. There is a screw which is most forward, with respect to the car and it is therefore the screw which is closer to the body line. The other two screws go deeper into the well.

Q. I note element 61, would you indicate what that element is in Figure 10? A. 61 is a flap which is described as intended to divert the water running down the top over the body line. This means that water running down the top would essentially follow the path shown by my arrowed line.

The Court: It is part of the fabric?

The Witness: Yes. It is sewed on the fabric and if there is a slight resiliency, the description of 61 is a slightly resilient flap.

The Court: Is 59 that coarse threaded screw you spoke of?

The Witness: That is right.

* * *

Mr. Pollock: Actually we will concede the best features

of these are snap fasteners as well. I believe they are two [671] separable parts and they can be snapped apart.

The Court: I would not think it would constitute an invention, to change from one to the other.

Mr. Pollock: No, but actually he does speak of it as snap fasteners.

The Court: They are not automatic?

The Witness: No, these have to be screwed and unscrewed when the top is raised and lowered.

The Court: Yes.

Q. Could you indicate how far along the sides this flap 61 extends? A. Well, 61 in his construction is made to overlap the body line and extend parallel to the side of the car at the exterior of the car, so that if water should get in, it would have to actually be forced upward before it can reach the inside of the car.

Q. Now would you indicate whether or not this flap extends from the member, from the point of securing 25, the forwardmost point of securing 25 to the forward edge of the fabric? A. No, this flap—.

Q. Would you refer to Figure 2 in the reference? A. Yes. Figure 2 shows that such flap extends from the bottom of the window frame to the first point of attachment 25. It is labeled as flap 61 in Figure 2. This is actually the overlapping portion of the flap.

[672] Mr. Wolf: Your Honor, I should like to call to your attention some specific language in this particular patent.

I would like, for example, to call your attention to the first column of the patent, the second paragraph, all but the last sentence in that first paragraph.

The Court: Yes.

Mr. Wolf: I would also like to call your attention to specific language describing this arrangement shown on

Page 2, the right-hand column paragraph, commencing with Line 20 and also the paragraph that follows it.

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[673] Q. Now, in your opinion would it make any difference in this particular construction how far down the flap that extends within the body line might extend? A. Well, the flap can be extended by any amount into the body.

Q. There is a specific shape to this flap, does it make any difference in the patent? A. No, the only thing I would say is that as long as it must be detached, the screws 59 should be within reach of the operator.

Q. In your opinion does this fabric adjoin the inside of the tonneau of this car? A. Yes, the flap 20 is shown in Figure 10 to be adjoined to the body.

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Q. Could you compare the shape of the fabric and its function [674] in this construction with the construction you saw in the defendant's 1953 model car, 1953 Ford model car? A. My recollection is it did not have a flap in that car.

Q. I would like you to describe the positive similarities before you describe the dissimilarities. I don't mean necessarily of course the manner of stitching, I mean the overall arrangement. A. As far as the shape of the fabric is concerned, I would say it is very similar.

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[675] [Enlargement of the Ackermans patent marked Exhibit PP.]

[676] Mr. Wolf: Secondly, the Best references, the Best enlargements which were also marked by the witness, which comprise two enlargements.

[Enlargement of Best patents marked Exhibit QQ.]

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[687] The Witness: There is a sealing means along the rear edge which is similar to the Ackermans way of obtain-

ing a seal, that is by tensioning the fabric so as to obtain pressure of fabric against the rigid member which here is labeled 6 in Figure 1.

[689] Mr. Wolf: I believe, your Honor, there is an Omnia publication which has already been submitted. I don't believe we have but one copy.

[690] The Court: You stated you were going to rely on the photographs because of lack of a translation.

The Court: I believe the plaintiff is entitled to an original translation.

The Court: I can read French myself, but that does not help the plaintiff too much. However, he can point to the photograph and let's see where we go from there.

[691] Q. I would like you to examine the photographs and indicate whether in any of the prior art you have examined you find a construction disclosed which you would consider to be typified by these photographs.

[692] The Court: Before ruling on Mr. Pollock's objection, I would like to hear what the witness has to offer about this.

The Witness: You mean the French?

The Court: Not the French, no. I have read the French, from which I get no help at all—by which I mean it doesn't, assuming my translation be correct for the moment, it doesn't seem to be anything but a general description—this is a happy invention it is not too expensive, it produces a torpedo effect.

The Witness: Well, to me this seems to be the construction of the first Bessonneau reference we looked at.

Q. Will you indicate support to your conclusion. A. First is the fact of the flaps. The flaps are indicated in the first

reference. In Fig. 1 they are shown by the numeral 71.

Then you can compare the last picture in the publication to Fig. 3 in the first Bessonneau reference we examined, and in the third picture some of the bows are visible and from the outline it is the same as those which would be expected to be visible from Fig. 3.

Further, by the contour of the cloth one could tell the position of some bows in the third picture in the publication; and I feel that one such bow is the one which would be numbered 4 in the Bessonneau reference which is seen supporting the cloth [693] above the window in the first picture. Similarly, bow 48 seems to be the cause for the particular shape of the fabric in the third picture.

Q. Will you compare the tonneau contour? A. Yes. In general, the tonneau contour is of similar shape, but also the third picture in the publication shows no external flaps along the rear edge, which is one of the characteristics of operation of the Bessonneau reference examined.

Q. You mean, you can't see it in the picture; is that correct? A. I will say the picture shows along that rear edge there is no metal flap which opens outwardly to allow for the raising of the top.

Q. Isn't it true in this Bessonneau that the metal flap slides down within the body and not outwardly, as shown in Fig. 6? A. Yes, Fig. 6 shows one such possible arrangement; and Fig. 4 shows another. In both of them the metal cover slides into the body.

Q. So to that extent it still could be identical? A. Yes.

Q. Do you have any other remarks you care to make with respect to this reference? A. I don't think so.

The Court: I will take it.

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[705] *Cross-examination by Mr. Pollock*

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[707] XQ. Now in order to approach this problem, I

would like to get briefly at your model. As I recall you said this is a model of the first Bessonneau patent 2,185,581, is that correct? A. Yes.

XQ. You said that the various linkage elements were actually drawn from the drawings in the Bessonneau, is that correct? [708] A. That is correct.

XQ. You scaled them off, did you? A. Well, we—the scaling was done by making a photographic enlargement of the Bessonneau drawing.

XQ. So actually then it is your contention, I take it, that in so far as the linkage elements are concerned, they are a fairly accurate representation of what Bessonneau shows in the drawings? A. Yes.

* * *

[709] XQ. I realize that. But my question is, do you believe that the folding, if you will, of these linkage elements in your model is a fairly accurate representation of the Bessonneau folding—in so far as these particular linkage elements are concerned? A. Yes, I do.

* * *

[712] XQ. Are you telling me now your model does accurately depict what is shown in the Bessonneau drawings? A. I'm just saying—

XQ. Well, I would like an answer to that question. Does it or does it not accurately depict what is shown in the Bessonneau drawings? A. It is the same criticism I had before. The attachment of links is not consistent with either side of gear, for instance.

XQ. So that is your answer, this does not represent accurately what Bessonneau shows in his drawings? A. What do you mean by accurately?

XQ. Well, I mean—

Mr. Wolf: Objection, your Honor. I think that Mr. Bessonneau himself is not consistent in one view with the other.

[713] The Witness: I think Fig. 2 is very clear, your Honor. It shows that the bow element 4 and the bow that we have numbered 10 here are positioned one on top of the other.

XQ. But that is not the case in this particular model; is that correct? A. That is right.

XQ. Now you did use the drawings to make the model; is that right? A. That is right.

XQ. Now in your opinion which is in error: the model or the drawings? Obviously they do not correspond. A. Well, the size of the elements is still correct, and the way we have assembled the elements for simplicity is exactly the same as shown in Fig. 2 of the Bessonneau drawings.

XQ. And as the result of that the elements have a quite different positional relationship as shown in Fig. 2 of the Bessonneau Reference; is not that correct. A. If you want to study the relationship of the bows in motion along the belt line, I would say that 62 of the Bessonneau reference is what you have to look at. We have not tried to [714] reproduce t.. s in this model.

XQ. But I repeat my question. Obviously there is a variance between the operation of your model and the operation as shown in Bessonneau? I repeat my question again. In your opinion, which of these two items, namely, the model and the drawings, are in error? A. It all depends on what you mean by error.

XQ. Well, they do not correspond. A. As far as they do not correspond, I say the model is in error.

XQ. Will you agree with me, that in your model the element 10, which you have said corresponds to the Mackie-Duluk wiper arm, is relatively widely spaced from the side-wall of the car? In your model, is not that the case?

Mr. Wolf: Objection, if your Honor please. What do you mean by widely spaced?

XQ. Is it not true that it is spaced by at least the thickness of another pillar member?

Mr. Wolf: Objection, your Honor.

[715] The Court: I will take the second question.

XQ. Is not that obvious to you? A. Yes.

[717] XQ. Now, just for purposes of our discussion here, since you have made a great deal about these drawings, do you have any information about how patent drawings are prepared?

A. No, I do not.

[718] XQ. In other words, you're saying then you don't know how patent drawings are prepared, or how accurate they are intended to be; is that correct? A. I think that is correct.

[721] XQ. Referring your attention to the tilt hoop 2, will you concede that this is a fairly long hoop, the total length, I am concerned with the length between the ends.

The Court: You have in mind, regarding that hoop as a single unit, going all the way from one side around the back and up to the other side.

Mr. Pollock: Yes, your Honor.

The Court: It is obvious.

XQ. Have you not testified with regard to the Mackie-Duluk structure, it is extremely difficult to fit a fairly short wiper arm to the same geometry to the side of the body?

[722] A. I don't think so. No, I don't think so.

Mr. Pollock: If the Court will bear with me for just a

moment. I invite your attention to your testimony in the record, Page 558, I quote starting about Line 8 I believe you said, showing you your testimony:

"It is very understandable that it is very difficult to shape a belt rail to conform exactly in a comparable geometry with the wiper arm 11."

* * * *

XQ. Did you not so testify? A. That is right, yes.

* * * *

A. I repeated essentially what Mr. Booth stated in his testimony, that in manufacturing it is difficult to make the shape of the wiper arm conform with the exact shape of the body line and therefore you would expect variations in the clearance and you would put a resilient member there.

* * * *

[723] A. The other kind is just local dis-conformity, I mean, overall the movable member 2 of the Bessonneau reference may conform with the side of the tonneau but in spots you may find for one reason or other suddenly there is a gap.

[724] XQ. As I understand it, you said it was very difficult to shape the wiper arm of the Mackie-Duluk to the belt rail of the car, is that correct? A. To shape it exactly, that is where the difference liinges.

XQ. By the same token, is it not very difficult to shape the tilt hoop 2 in the body of the car? A. Yes.

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XQ. Now you have testified that the hoop 2 in Bessonneau is intended to form a seal in the belt line. A. Yes.

XQ. We have already found that there might be some gaps between the tilt hoop 2 and the belt rail. [725] A. That is right.

XQ. Is it your understanding that the word "seal" is intended to encompass these gaps as well? A. No, I would

say you don't have a good seal. I said, where you have a gap it makes a tremendous difference as far as the amount of water that gets in is concerned.

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A. I will say that Bessonneau provides a fit and it is probably not a good sealing means in the construction he shows and that is probably the reason for the troughs along the side of the car.

[726] XQ. Now with this something less than good fit, and the troughs, do we then have an effective seal? A. I don't understand.

XQ. Well, as I understand your testimony, you said that he does not have a good fit, possibly he provides troughs therefore.

The Court: I think what Mr. Pollock is asking you, is there any assurance of the water that gets through, that it will go into the troughs?

The Witness: Well, if a car is taking a very sharp turn or something like this, so that there is a lateral acceleration of the car, then the water that gets in can conceivably escape the trough. If the trough does not provide for such occurrences. We pointed out the shape of those troughs is not very well described and I think that those troughs would extend into the body so as to catch such water and it depends how much you provide for rapid turns in a case like that.

XQ. Where it extends into the body, that is an assumption of your own, I gather? A. I would say it is more than my own.

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[727] XQ. So that if all the water is required to go into the trough by some structural element, then we have a good seal in so far as the interior of the car is concerned? A. Yes.

XQ. But you find no structural element in Bessonneau which requires that all water go into the trough? A. No. I

said if the trough is large enough the water would be required to go into the trough. What you call the structural element, it is just a large trough.

XQ. Isn't it quite true that the trough is considerably below the belt line of the automobile in Bessonneau? A. In the average, yes.

XQ. Is it not true all water passing the belt line must pass quite a distance before it encounters a trough? A. Yes.

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[728] XQ. As I understand your testimony, one of the major determinants in Bessonneau in determining whether or not all the water will go into the trough is the dimensions of the trough, is that correct? A. Dimensions and its position.

XQ. Right. A. With respect to the belt line.

XQ. And as I understand it also Bessonneau has no good description of dimensions of his trough, of where it is positioned, is that correct? A. I think that is correct.

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XQ. Is it not true that if we attempted to increase the width of the trough, that would tend to interfere with the folding or linkage into the recess? A. Yes, that is true.

[729] XQ. Therefore, can you not say that because of the nature of the linkage trough by Bessonneau, his trough must necessarily be narrow? A. Well, you are limited in the amount of inward dimensions of the trough.

XQ. Even though lateral accelerating forces might throw the water farther than this limited dimension, is that correct? A. Yes.

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[741] XQ. So, in other words, when you think of the simple changes which could be made in the Bessonneau structure, you are drawing on a half-term study; is that not so? A. Mostly.

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[742] XQ. That is what I meant by the teeth. Have you ever had any practical experience working with linkages of the type shown in the Bessonneau patent? A. Yes, I would say yes.

XQ. What? A. It is again this half-term training.

* * *

XQ. You can't remember any work with automatic linkages; is that correct? A. That is correct.

* * *

[745] XQ. My only problem is, my only real point is when we start making the changes you suggested, we find we have a whole bunch of incidental problems arising. A. Yes, but they are simple and independent problems we have [746] seen so far, how many problems?

* * *

The Court: I raised the question as to whether he could make it solidly affixed without getting into a ripping process. He said he could, if I remember it, but I don't think he said how he was going to do it.

The Witness: Let's see; I attempted solving the problem in about 20 seconds and I got lost in it. I would like to get this straight.

XQ. Well, let's take the first problem which the Judge suggests. If you recall, we found that when the lid folds up, when the top folds on the Bessonneau structure, we have a great puckering of fabric in this unattached area. I invite your attention to Figure 3. The question was, could this fabric be permanently attached to the body in this region?

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[748] The Witness: Are you asking whether the lower edge, the lower loose edge of the fabric as is shown now in Figure 1, for instance, could be attached at the belt line which is facing it permanently in this structure as it is now?

XQ. Yes. A. I think it is obviously not.

XQ. You could not attach it there? A. No.

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[749] XQ. If we were to extend the fabric downwardly into the automobile on the Bessonneau 2,185,581 structure, would there be any problem with an interference between that fabric and the gear mechanism? A. Yes, there would be an interference problem because the gear shafts, the gear, the pinion which follows it are all [750] mounted directly on the wall of the car.

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XQ. I believe what I am trying to find out is this. As you recall in your discussion of the Bessonneau patent, you pointed out how all of these elements and so forth of the Bessonneau could be changed, could be modified so as to finally arrive at the Mackie-Duluk structure. Do you recall such a discussion? A. I did not start from simply the Bessonneau structure.

XQ. Well, is it your contention that Bessonneau 2,185,581 could be modified to come up with the Mackie-Duluk structure? A. Yes, but if you look at only this reference, it may not be really obvious.

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[755] XQ. Let us get into Bessonneau 2,157,783. Do you recall that you testified with regard to this patent that the rearmost end of hoop 60 is positioned by the fabric 8? A. Yes.

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The Court: I will anticipate what he is trying to prove. He is going back to the testimony the other day we had, somewhat extensively as I recall it, that the pressure that he stated was necessary in order to perform a seal here was largely supplied by the fabric and that if you were going to run the fabric down below the belt line of the car in order to achieve some of the points in the Mackie-

Duluk, you are going [756] to have to add to your mechanical structure in order to get the pressure, from which he will argue again we get into complexities. If you want to have any points beyond that, you may.

[759] XQ. Now would you agree that this patent does not teach a trough was in the car? A. That is right. There is no trough mentioned in here.

XQ. Does Mr. Bessonneau describe the provisions of a fender well here? A. No, I am just trying to answer the question.

XQ. Yes. Does Mr. Bessonneau describe the provision of any drains in the car? [760] A. No, he does not.

XQ. Now, in your discussion of this particular patent, you discussed how you would go about modifying it? A. Yes.

XQ. Now you said, first of all, you would modify it by adding a linkage at the rear of 60? A. That is right.

XQ. Would you agree that Bessonneau does not teach such a linkage at the rear of hoop 60? A. He does not show a linkage. I don't know exactly what you mean by teach.

XQ. Well, I meant show or discuss. A. All right. Yes, that's right.

XQ. Now you stated also, I assume, that one of the elements of your modification would be to detach the fabric from the rear portion of 60 and then attach it to the car. I am describing the Mackie-Duluk structure now. A. Yes. I think so.

XQ. So you would have to make that further change, then? A. Yes

XQ. Then, as I understood your testimony, you proposed to break [761] the hoop 60 up into three parts and eliminate the back part; is that correct? A. Well, this is a part

of attaching the fabric along the rear edge. I don't have to break it. I just noticed that I wouldn't have any use for the rear part of this hoop 60 and I could save the trouble of making it.

XQ. So what you are saying, in effect, is, that you are to attach the fabric at the rear part of the car, a part of the hoop 60 as taught by Bessonneau then becomes useless; is that correct? A. That is right, yes.

XQ. Yes. Then you proposed to change the shape of the fabric in the side quarter; is that correct? A. Yes.

XQ. And you proposed to extend the fabric down inside the car; is that correct? A. Yes, that is right.

XQ. Then you proposed to add a trough that is not taught by Bessonneau; is that correct? A. That is right, yes.

XQ. Then you proposed to attach this flap to the trough; is that correct? A. Yes, I think so.

[67] XQ. You have taken the position that you are an expert. You have also taken the position certain changes are obvious and simple. I am trying to determine whether or not these changes were so obvious to you immediately as an engineer or whether or not they were suggested to you.

I ask you, again, did you upon reading this Bessonneau patent suddenly realize that there was some great advantage to be derived by extending hoop 2? A. Yes, if you extend hoop 2 you can get the portion which is loose as shown in Figure 3 to come in better contact with the body of the car.

XQ. That is not my question. I am saying, did you realize it, you, of yourself? A. Well, the thing is, it isn't the first patent I read, I mean the reading of the patent indicated the desirability of having such a supporting hoop

2 all around and the desirability of having the pressure on the fabric all around.

* * *

[768] XQ. One of the early patents you read was the Mackie-Duluk patent? A. I think so.

XQ. Is it from your reading of this patent you saw the desirability of extending hoop 2? A. This contributed to the conclusion.

* * *

[773] XQ. I invite your attention to the British Bessonneau patent we have discussed, No. 447,641. I believe that you have testified that this patent shows a portion of fabric of the side quarter extending inside the car. A. Yes.

XQ. I believe you also testified that you drew this conclusion from the drawings? A. That is correct, yes.

XQ. Is there any portion of the specification which describes such a construction? A. That the fabric extends down below the body line.

XQ. On the sides. A. On the sides. Well, to my knowledge, my understanding is, at Page 3, Line 37, it has some such indication.

XQ. Page 3, Line 37? A. Yes.

[774] XQ. It just says the end of the canvas is fixed within the space provided for the folding hood in the rear of the vehicle body. How does it justify an extension of the flap on the side? A. I understand the specification "provided for the folding hood," that that is what is in the rear of the vehicle body and the end of the canvas. Of course any edge of the canvas can be considered an end.

* * *

XQ. Do you find any specific language concerning the side of the car? A. To some extent, when you ask me a question like this, I have to do a lot of reading before I answer.

XQ. I don't wish to make a statement on my own. I

would appreciate your reading it. I will expand the question so that if you find any language at all which is concerned with fabric on the side of the car, or any specific language concerned with the side of the car in any way, would you please identify the language, speaking of the sides, any language? A. I don't think I find any language.

* * *

[775] The Court: I don't blame you. Here, beginning at 25 in Figure 1 and going away around until you get to 26 is the fabric. You said you felt the dotted line beginning at 26 and extending to the left was also indicating the fabric. Am I right?

The Witness: Yes, that is right.

The Court: Where is the fabric in Figure 3, other than the heavy line?

The Witness: Well, we have the same kind of edge there.

The Court: You are pointing to the horizontal edge, corresponding with this wide strip?

The Witness: Yes, we have called it 5-A.

The Court: 5-A, yes. Now where is the edge that extends from 5-A upwards at the left-hand side, that end?

[776] The Witness: Well, I contended that edge coincides with the pillar 1, that there is an attachment to pillar 1, and I said this because the dotted line in the body line shown in Figure 1 suddenly becomes a solid line in front of the pillar 1, as the body structure falls, as shown in Figure 3.

This seems to indicate that something which was covering that body line is not there any more, as bow 1 moves clockwise and this something I think is most obviously the fabric.

The Court: So that there is a pucker which is not demonstrated in the drawing.

The Witness: A pucker.

Mr. Pollock: Pucker.

The Court: A fold, a series of folds.

[777] XQ. So the drawings themselves do not indicate that 26 goes on the side, is that correct? A. That is correct, yes.

XQ. There is nothing in the specification that indicates that 26 goes on the side. We have already looked for this question of sides. A. Yes, that is right.

[778] XQ. If you are contending that this fabric is fastened down on the sides, what is it fastened to? A. Well, it could be, it could be fastened to such a member as 26 on the sides.

XQ. I agree it could be, possibly, but do we have a member such as 26 on the side? A. It isn't shown in these drawings.

XQ. Again I ask you if the fabric is as you contend fastened on the side, what is it fastened to? A. To a member not shown in the drawings.

XQ. Is there any discussion in here that the fabric is fastened at all on the sides? A. Discussion, no. It is just my argument, which was Figure 3 would tend to show a wavy line, 5-A, instead of a straight line, 5-A.

XQ. That would indicate no fasteners. A. If I had a wavy line, 5-A, that is right, that would indicate no fastening.

XQ. You find no support in either the specifications or the drawings for your proposed fastenings on the sides? A. No.

[779] XQ. Except for that one consideration, do you find any other support in either the specification or drawings for your alleged fastening on the sides? A. No, I don't.

[780] A. Well, what I intended to say in my previous answer, is the fact you bring the fabric so low in the well of the body, maybe what effects a seal, such as water running down along the body line, as far as that is concerned.

XQ. Just the bringing of the fabric inside the car? A. Yes, the fact that the water is guided, controlled down to that level. Then it may be we have to prevent it from entering the car later on as it goes below that level.

XQ. And that guiding of the water is in your view one of the characteristics of the seals that we have been discussing? A. Yes, that is right.

* * *

[784] XQ. Is it not true that in the Ackermans patent the tension of the fabric alone is utilized in an effort to make a seal? A. At the belt line, yes.

XQ. Now does Ackermans provide any auxiliary structure whatsoever cooperating with the fabric at the belt line to facilitate in making this seal? I have particular reference to a structure such as the wiper arm of Mackie-Duluk. A. No, there is no wiper arm pushing the fabric—although I could conceive that the fabric flap itself could be strengthened by some kind of member attached to it.

XQ. This is your own thought, I assume? A. Yes.

XQ. Did you find anything in Ackermans to restrain the inward motion of the fabric other than in the tension of the fabric itself?

The Court: By inward you mean towards the center of the car?

Mr. Pollock: Towards the center of the car, yes.

A. I would say the same thing. I don't find such things, except for the solidity of the flap itself.

* * * *

[785] XQ. But in the particular structure that Ackermans shows in Fig. 9, I understand your testimony to be that if the fabric were permanently attached to this body

it would rip loose? A. Yes. This is a matter of speculation, of course.

XQ. Do you find any suggestion in Ackermans that the flap should or could desirably be extended all the way down to the trough 124? I am asking you for a specific reference to this patent. A. No, I don't think so.

• • •

[788] XQ. If we were to simply add a wiper arm to the Ackermans structure, is it not possible that wiper arm might engage the lower end of the relatively short flap 130 and push it out of place as the top is being raised? A. No. Again this depends on the rigidity of this flap 130.

• • •

[789] The Court: In other words, if it is a flap that will never pucker, then that's one thing; if it is a flap that will pucker, then Mr. Pollock's suggestion has some merit to it.

The Witness: Yes.

The Court: Right.

XQ. There are some special considerations, therefore, to be recognized when you are simply trying to add a wiper arm to Ackermans; is that not correct? A. Well, it also depends on the length of that flap.

XQ. Well, we are speaking of the flap that Ackermans actually shows. I believe you characterized it as a relatively narrow or short flap. A. That is, looking at Fig. 9,—

XQ. Yes. A. —that doesn't look as short in Fig. 10. It seems to me it's not the same size. I don't know.

XQ. Well, there are some special problems involved if you are adding a wiper arm, are there not? A. It all depends which one you start with.

• • •

[791] XQ. Is there anything to keep Ackermans flap from shrinking under conditions of continued use?

• • •

Mr. Pollock: Shrinking in an outward direction, out of the body of the car.

The Court: All right, you may have that.

[792] A. Well, the fact that sometimes in reality the tension between the pillar 22 and the point of attachment 132 produces a pull, a downward pull on the fabric in case it tries to shrink upward; so if there was such—

The Court: Only at the end, however: isn't that the case?

The Witness: Well, the pull between 22 and 132, we said, tends to maintain a straight line between 22 and 122.

The Court: A rather inefficient method of pulling down in the middle, is it not? In other words, you have lost pretty much your leverage.

Mr. Pollock: In the middle of the flap.

The Court: In the middle of the flap, halfway between the two points.

The Witness: Well, if there has been no shrinkage, you have no pull downward.

The Court: No. If there has been shrinkage the pull downwards, so far as the middle is concerned, is very slight, is it not? In other words, the pull is out.

The Witness: Yes.

* * *

[798] XQ. Let us take up the next patent, Mr. Brosens. The next patent, as I recall, was Best patent No. 2,289,173. A. That is right.

XQ. Does that patent have any troughs in it? A. No, it does not. No, I don't think it does have any troughs.

XQ. Does it have any wiping arms? A. No, this patent does not.

XQ. Does it have a portion of fabric coming down inside the car and permanently secured to the car?

* * *

The Court: Permanently means while the top is both

up and down and in between. In other words, it never has to be disturbed in connection with raising and lowering the top.

The Witness: No, this fabric has to be detached at the rear corner in lowering and raising the top.

XQ. In both operations, you have to actually have to do some physical attaching or detaching. Is that not correct? A. That is correct, I think.

* * * *

[808] XQ. Let us turn to this Omnia publication. If I were to hand you this publication as an engineer, you being the engineer, and ask you to reconstruct this structure, could you do so? A. The entire structure?

XQ. Yes. A. The power mechanism, I could construct you something, but given the great number of possibilities of such an arrangement I would say the chances would be I would not come up with what is actually under this.

* * *

[809] XQ. In the early part of your testimony, Mr. Brosens, you discussed what you termed two types of seals. A. That is right.

XQ. You said that the Maekie-Dulnk teaches a seal in the belt line and another seal down below, is that correct? A. I am not positive of that. I do not know what you mean by "teaches."

* * *

XQ. Did you not testify that no matter how much pressure is exerted in this region some water is bound to come through? A. Yes.

XQ. You did so testify? A. That is right; yes.

[810] XQ. Now we have another seal down below. You said the trough and the attachment of the fabric to the trough? A. Yes.

* * *

[814] XQ. Have you seen a car with a shingle on it? A. Yes.

XQ. From your understanding of the word seal, as you define it, would you be able to believe that that shingle structure at the belt line comprises a seal at the belt line? A. No, I would not. You are talking of a seal at the belt line.

XQ. What is your distinction?

The Court: I can make that myself, it is a substitute for a seal at the belt line.

XQ. Is 90 per cent of the water dispersed over the exterior of the car according to Mr. Shapiro? A. I would say that that is fairly accurate layman's language.

XQ. Where is the shingle actually located in the structure? A. Slightly above the belt line.

XQ. In all cases?

Mr. Wolf: I object, your Honor.

Mr. Pollock: It is our contention that when the shingle on these tops is there, every element of all the claims is met. In addition, we have a water shedding of at least 90 per cent at the uppermost portion of the car, which will [815] give us a seal in that region, as well.

I invite the Court's attention to the fact the shingle is part of the fabric itself, when the fabric moves the shingle moves. We have a lateral reading.

I am merely trying to get this witness to admit that.

The Court: Are you trying to get him to admit it is an equivalent?

Mr. Pollock: I am trying to get him to admit, assuming Mr. Shapiro's testimony is correct, with a shingle they get 90 per cent of the water over the outside of the car, that is within his definition a seal.

The Court: At the belt line?

Mr. Pollock: At the belt line, yes, your Honor.

The Court: If he said so, I would not agree with him.

It is a method of shedding water without having a seal at the belt line.

Mr. Pollock: I believe the question of a seal is how much water can get in or out.

The Court: No. If you keep the car in the garage and not allowed on it, would you have a seal?

Mr. Pollock: In so far as water getting into the trough.

The Court: Everybody who kept his car in a garage would be violating your patent.

Mr. Pollock: That is not my point.

[816] The Court: I did not suppose so.

Mr. Pollock: My point is—.

The Court: I think you are in the realm of equivalents and not in the realm of something more direct.

XQ. Inviting your attention to the Mackie-Duluk patent, I show you this patent and direct your attention to Figure 2. Do you see this fin 27 we have been discussing? A. Yes.

XQ. Is the upper surface of that fin operative to direct water over the outside of the car? A. I would say no matter what the shape of that member is, if it prevents the entrance of water between it and the fabric, that it will result in diverting water over the side of the car.

XQ. At least in so far as the upper surface of fin 27 is concerned. Can you say it has the same function with regard to water shedding that a shingle would have? A. No, in a shingle you have to be careful about the shape you give to it so that you project the water over the belt line.

I am saying in this case no matter what the upper surface of the member 27 is, if it is effecting a seal between the fabric and it, then the water will run over the outside of the car. The shape of 27 does not matter.

XQ. It does perform a water shedding function, though; is that correct? [817] A. No, I don't think so; by "shedding" I would understand you intend to deflect the flow in a [illegible] particular way.

The Court: Excluded.

XQ. Mr. Brosens, from your understanding of the Mackie-Duluk patent, if we were to eliminate the flap that goes inside the car and merely attach it outside the car, would there be any purpose in the trough 22? A. No, I would say, if any, very little. The only reason for my doubt is that at the very ends of the flap we may have open gaps where the water might get in, but that is all I would consider.

XQ. Would there be any purpose in the arm 10, the wiper arm 10, that is? A. No, I would say No.

XQ. Is it not true, therefore, that the only reason that the trough 22 and the wiper arm 10 perform the functions that they do is because the fabric comes inside the car and is adjacent to the trough after passing the wiper arm? [858] A. What do you call the functions?

XQ. I believe you described the functions of the wiper arm; and certainly the function of the trough is quite obvious. A. All right. Then my answer is yes, to your question.

XQ. Now, with regard to these functions of the wiper arm you have mentioned, you described two functions; is that correct? A. Yes.

XQ. One was to restrain inward motion of the fabric and the belt line, and the other was to attempt urging the fabric over into contact with the belt line. A. Well, my feeling is, urging is a loose word. I actually said, press the fabric against the resilient member with the same pressure.

XQ. Even if we have a gap at the belt line, is it not true the wiper arm is still fully performing its restraining function? A. You mean, if the fabric 20 is not in contact with the resilient member 27?

XQ. That's right. Let's say it's a quarter of an inch away. A. Then the wiper arm is restraining the inward motion of the fabric.

XQ. Is it not also true that the degree with which the wiper arm [819] performs its second function, as you defined it, depends upon how far the wiper arm pushes the fabric over toward the belt line? A. The second function being that of pressing the fabric against the resilient member?

XQ. Yes. A. If we say that at all times it is pressing the fabric against this resilient member with pressure, then I would say the amount of pressure has relatively very little to do with the degree of the function, and if we do not have such pressure between the fabric 20 and 27, I would say we do not have the function there altogether.

XQ. In other words, you would say that if the wiper arm is moved back, for example, it is no longer performing the function that you said it should perform, or was intended to perform? A. Inward in the car?

XQ. Yes. A. If it is moved inward to the extent that the fabric loses contact with the resilient member 27, then I say it is not performing its expected function.

XQ. How far inwards do you say it has to be moved in this connection? A. Until the contact is lost between 20 and 27.

XQ. But even when we do this, you say the wiper arm is still performing a function, namely, that of restraint? A. The inward motion of the fabric?

[820] XQ. Yes. A. Yes.

XQ. Now, just one further question. As I understand it, you said that the fastening of a fabric flap to a trough comprises a seal? A. Yes. That is, if the fabric is so arranged as to guide the incoming water into the trough. I mean, I could realize a fabric with holes in it. There is some common sense you have to keep in mind.

XQ. From your understanding of everything that has gone on, is that trough and the seal which is accomplished

with that trough located at the rear quarter of the automobile? A. Yes. That is right.

[822] *Redirect Examination by Mr. Wolf*

[838] Q. My question was, did you draw that particular flap based upon [839] your knowledge of flaps which you have seen in the prior art?

Mr. Pollock: Would counsel clarify what he means by prior art?

The Court: I think so, yes.

Mr. Wolf: Prior art—I had specifically in mind, your Honor—

The Court: Ask him what he had in mind.

Mr. Wolf: All right.

Q. What did you have in mind? A. Well, you asked me to draw a downward extension of the fabric.

Q. Yes. A. In the first Bessonneau reference. So I just drew a downward extension which doesn't interfere with the motion of the linkages shown in my drawing.

The Court: And then Mr. Wolf wanted you to tell him whether there is anything in any other reference we have been discussing the last few days that would suggest to you the positioning of the fabric in that manner.

The Witness: That is, extending it downward, or giving it this particular shape?

The Court: Extending it down, first off.

The Witness: I would say the Ackermans reference and the British Bessonneau, and the Best reference.

The Court: And is there anything that would suggest [840] this particular shape?

The Witness: No, you are free to choose the shape in the first Bessonneau reference, except for the front edge.

Q. That wasn't the question. The question was, Does

any of the prior art suggest this shape?

Mr. Pollock: No, the question was, What suggested the shape?

[841] Q. What prior art suggests that shape? A. Essentially, the Ackermans reference.

Q. All right. A. Also, the British Bessonneau has the same rearward leaning front edge of the fabric flap.

Mr. Wolf: Now, your Honor, I should like to offer in evidence that exhibit.

Mr. Pollock: Cognizant of the Court's ruling, I would merely like to repeat my objections on the same grounds.

The Court: Yes.

[Drawing marked Defendants' Exhibit SS.]

* * *

[851] Mr. Wolf: Yesterday Mr. Pollock requested that you point out specific language in connection with the Bessonneau patent which indicated provisions for a seal or closure in the side. I believe you pointed to certain language, I think it was Page 2, the first column. A. Which of the Bessonneaus?

Q. The first one, I believe. I believe there was language to the effect that the hoop moved vertically, is that correct? Do you recall that? A. That is right, yes.

Q. I believe you started to point out some correlation in this language to the drawings, but you did not finish. Could you do that right now, please? A. Yes. What I had in mind is that the view, the top view shown in Figure 2 describes the side of the body as a narrow construction, so that if hoop 2 moves essentially in a vertical plane, I would expect that it is, even after it reaches the belt line, it is still very close to the body panel, [852] if there is a body panel.

That there is a body panel seems indicated to me in Figure 7 where the support for the flap is shown. The flap is shown hinged on a plane which I don't think carries

any number. It is a plane which supports essentially the lower parts of the mechanism for lifting the flap.

This plane is actually on the inside of the belt line and Figure 7 suggests that this plane is quite in a vertical plane, because Figures 1 and 7 seem to indicate that plane 71 stands vertically upright when it is lifted and Figure 7 shows that the flap 71 is aligned with the plane that supports the flap.

This means the plate which supports the flap seems to be considerably on a vertical plane. So all in all it seems that this hoop—well, this is wrong, I have been confused, the plate which supports the flap is on the inside of hoop 2.

• • • •

I think I can summarize this. In that small area [853] between the outer edge of hoop 2 and the outer edge of the car, there seems to be a few elements which consist of vertically downward projecting planes. This suggests to me that hoop 2 actually comes close to something which could be a body panel. I thought at the beginning Figure 7 illustrated the actual body panel, but it does not.

• • •

[855] Mr. Wolf: Do we have the Omnia reference?

[856] Mr. Pollock: Here, use my copy [handing].

Q. The Court has requested that you point out in this particular exhibit where you considered the belt rail.

• • •

A. Well, I would consider the belt rail at this joint, where this is now the plate 71 mounted in the first Bessonneau reference; and this is the side of the car which in here is shown as a rather narrow body between the edge, the outer edge of flap 71 and the actual surface of the car. The pictures are not—

Q. Perhaps—

Mr. Pollock: I would like to hear the witness' answer.

A. The pictures are not of fair clarity but I think are

of sufficient clarity to indicate that the contour of the body actually continues the downward fall of the metal plate at the edge of 71.

[861] Q. In the modifications which you recently discussed in conjunction with the drawings, do you consider that the elements which you combine work the same or differently as they did in the original? Do you understand the question? A. Yes. The linkages I would consider were in the same manner. The only thing I would think could be called working in a different manner is the fabric itself. For instance, in the— Can I see my pictures? [Handed.] For instance, in the British Bessonneau we notice the fabric might very well be making a gap with the belt line. And in the drawing where I show the hoop 6 is incorporated, if the hoop 60 presses the fabric against the belt [862] line, in that instance the fabric would be considered as working in a slightly different manner. But I think this is the only kind of reservation that I would make.

[863] *Re-cross-examination by Mr. Pollock*

[865] XQ. Which of the several patents that you have been discussing do you believe teaches this particular concept?

Mr. Wolf: Objection. Which concept are you referring to?

Mr. Pollock: The conception of the drawing of the fabric well below the belt line and permanently fastening it to the car.

The Witness: Essentially the British Bessonneau.

[866] The Court: Mr. Pollock, just asked you what patent taught you or suggested to you, I take it that is what his language means—

Mr. Pollock: Yes.

The Court: —that the fabric should be attached to the tonneau.

Mr. Pollock: On the sides.

The Witness: The edge 5-A is fastened to the tonneau, it isn't a moving arm.

XQ. That is the main reference you are relying upon in that regard? A. If you restrict the situation to permanent fastening, yes.

• • •

[868] XQ. You have quoted from time to time from the Mackie patent. I invite your attention to Column 3, Line 10, in the construction shown in Figure 1:

> "The toggle arms fold up to the near straight line position and the wiping arm 10 with its struck-out boss 11 wipes against the top material 28."

Do you understand what Mackie-Duluk is speaking of by this wiping action? A. The only idea that forms in my mind as to wiping is like, if you have a cloth laying on the table flat and you bring an arm like 10 and sweep over the top so that there is always a uniform contact, then maybe this is wiping, the same way a windshield wiper goes over a piece of glass.

XQ. Accepting your definition of wiping, do you find any such operation in any of these patents you have been discussing with relation to an area below the belt line of the car. A. Do you mean I find wiping in these structures?

XQ. Do you find wiping in these prior art patents you have been discussing? A. I find wiping in no reference at all, I would not use the term [869] Mackie uses.

The Court: Do you find any motion comparable to wiping, let's not talk about—

The Witness: You mean comparable?

The Court: Comparable to what Mackie means, by what

we have assumed that Mackie means by wiping. Maybe that is a poor word.

Mr. Pollock: It may well be.

The Court: The concept is clear enough. You have been discussing it, do you find that concept in any prior art?

Mr. Pollock: You have shaken your head. Is that to indicate a "No" answer?

The Witness: No, it means I am—

The Court: Thinking.

The Witness: Looking. I do not know how to answer this. If you take, for instance, the first Bessonneau reference; hoop 2, if you have a body panel there, it wipes the body panel, I would say in the same way Mackie uses the term.

The Court: So that if the fabric wasn't attached to hoop 2 but was attached to the car, then you would wipe it. Is that what you are saying?

The Witness: Yes, it is a result.

The Court: Is there anything more than that, can you say?

The Witness: I can say relatively speaking now [870] looking at it from the other way, as the fabric which hoop 2 carries moves with respect to the belt line, you can say relatively speaking that the belt line is now wiping the fabric.

The Court: I am not assuming they are in contact, which I did not by my prior question but meant to.

Mr. Pollock: The conception of the drawing of the fabric well below the belt line and permanently fastening it

The Witness: Yes, if wiping includes contact.

The Court: I could not wipe the tablecloth 6 inches away.

The Witness: That is right.

* * *

XQ. Now in the Ackermans patent is it not true that

one of the prime purposes of that patent is to secure horizontal tension in the flap of the fabric?

[872] XQ. Is it not true that the tension in the fabric is obtained because of the method of securing the top material to the folding pillar 22?

Mr. Wolf: Objection.

Mr. Pollock: It is right in the patent I read.

Mr. Wolf: It is in the patent, it is obvious.

The Court: You don't need to ask the witness.

Mr. Pollock: If he makes this extension in the way he has suggested here, we will no longer be able to get the tension.

[873] A. Yes. You are asking me essentially whether when this [874] extended down flat at the belt line, you have longitudinal tension in the fabric, can I provide for it?

XQ. I said in this structure you have been shown here. A. Yes.

XQ. Does it occur? A. All right. No, I don't see any purpose for it.

XQ. Fine, thank you. You were speaking of the fact that you could add a wiper arm to Ackermans if you extended the flap lower, is that correct? I believe your actual words were, if you extended the flap lower the wiper arm would not catch or jam the fabric. A. To describe the possibility of catching the fabric and jamming it up.

XQ. You agree there is that possibility, first of all?

The Court: He did yesterday. Why ask him again?

[875] A. No, I have tried to see the motion of a wiper arm or hoop 2 when some of the edge of the cloth is above it. If there is a chance, a possibility for jamming, under certain conditions I would expect the possibility of jamming.

* * *

[878] Mr. Wolf: I believe that is all the questions I have of the witness, your Honor.

Your Honor, I should like to offer in evidence certain portions of depositions taken of Richard S. Wright and John Wharton, July 2, 1958, at Baltimore. Could I just read the pages to which I refer?

The Court: Surely.

Mr. Pollock: In order to save time, your Honor, I will offer the remainder. I would wish you to indicate the pages you are offering.

* * *

[886] EDWIN S. BOOTH, Recalled

Direct Examination by Mr. Pollock

* * *

Q. I hand you a document and ask you to identify it. A. This is a certified copy of the file wrapper and contents of a patent to Ackermans, No. 2,549,153.

* * *

[887] Mr. Pollock: I would have, if you hear me out. I do not intend to offer this as an exhibit. My only purpose is to have this witness testify as to what division this application was examined and who the examiners were.

I will show the Ackermans and Mackie-Duluk applications were copending and examined in the same division in the Patent Office by exactly the same men, for whatever inferences can be gathered from this proof.

The Court: I will take it.

[888] Q. Have you examined the file wrapper of this Ackermans patent? A. Yes, I have.

Q. Have you examined the file wrapper of the Mackie-Duluk patent, the file wrapper is now Plaintiff's Exhibit 2. I believe? A. Yes, I have.

Q. Do these file wrappers show in what division of the

United States Patent Office these cases were examined? A. Yes, they were both examined in Division 47.

Q. Is there more than one Division 47 in the Patent Office? A. No, only one.

Q. Do these file wrappers show who the primary examiner during the examination was? A. Yes, in both cases it was Mr. Kanol.

Q. Throughout the prosecution of the both cases? A. Yes.

Q. Do the file wrappers show who the assistant examiner in each of the cases were? A. They indicate only by the initials H.G., which were the same in both cases all through the prosecution.

Q. Have you found any indication in either file wrapper that these patent cases, these particular cases, were involved in any Interference proceedings? A. No, I have not.

* * *

[889] Q. Would you discuss Claim 6 briefly? A. As applied to the construction shown in Figure 7 of the Mackie patent, Claim 6 starts out the same as the claims we previously discussed by defining an automobile body with a lower metal body structure or tonneau having a body panel. That is shown in 4 in Figure 7 of the Mackie patent, a folding [890] body structure supported by the tonneau which is indicated in 1 in Figure 7 of the Mackie patent.

Flexible top material supported by the bow which is shown in 20 in Figure 7 of the Mackie patent.

With the top material at the rear quarter extending down secured to the panel on the inside and below the top of the metal body or tonneau.

That is extending flat, but apparently has no separate reference character, but which is the portion of the fabric below the wiper arm 11-A.

The claim continues, that the flexible top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, that language

is similar to the language in the other claims we have discussed and recites the operation of the extended flap portion when the top is raised.

Mr. Wolf: Excuse me, your Honor, I believe they have not pressed Claim 6; am I correct?

Mr. Pollock: We have not. Let me ask you this preliminary question on that point.

Mr. Wolf: My understanding—

Q. Did you realize what the structure of the General Motors car was like before you heard Harold Shapiro testify? A. No, I did not.

Q. Explain that. [891] A. The only General Motors cars I have seen were operating cars in which the top well cover had not been detached and with the top well cover in place the wiper arm at the rear end is hidden.

Mr. Wolf: Your Honor, my objection is very fundamental. We asked them in interrogatories what claims they were going to press, as a basis of infringement. They never said Claim 6 would be used and we never examined it.

Beyond that, there has not been direct testimony or anything so far to date relative to Claim 6.

All of a sudden they are pulling Claim 6 out of a hat. I have never read Claim 6, after we had what claims we thought we were said to be infringing.

The Court: You consider during the lunch hour as to how you are hurt.

Mr. Wolf: Pardon?

The Court: That is something else I am going to put to you to consider during the lunch hour, as to how you are hurt. I am deferring ruling on your objection at this time. I will hear you after lunch.

Q. Would you continue? A. The claim continues, a wiping arm attached to a bow and caused to wipe the inside lower portion of the top material and grip the top material when the top is raised, the said forward end of

the wiping arm shown in 10-A is pivoted to the [892] main bow 1 on a pivot point which is not numbered, slightly above the belt line of the car, apparently.

The claim then goes on and means for guiding the rear end of the wiping arm comprising a slotted bracket secured to the tonneau and through which the rear end of the wiping arm passes.

The bracket is shown in 18 with a slot 17 and the wiping arm as an extension 19 which fits slidingly through the slot 17.

In this way when the bow is moved up or down the extension 19 will slide through the slot 17 to accommodate movement of the arm.

Q. Does this claim in any way differ from the other claims discussed previously? A. It differs in the particular definition of the means for guiding the rear end of the wiping arm and also in that it says nothing about a seal.

Q. You don't find the word "seal" in this claim? A. Not in Claim 6, no.

The Court: You do find the words "grip the top material"?

The Witness: Yes, I do, your Honor.

The Court: Is there any distinction that you draw?

The Witness: The claim says that the wiping arm grips the top material but it does not say at what point nor does [893] it define any structure against which the arm might press the top material to grip it.

Gripping carries an implication of holding and in this construction the top material is actually held against and pulled out by its fastening to the body panel.

I think that perhaps the word is not well chosen in the claim. I am not frank enough to be sure just what it does mean.

The Court: What word do you think should be in there? I am not going to say this binds the defendant in any way.

The Witness: I think that the definition in Claim 5 is a much better definition of what actually happens where it says—

The Court: Go ahead.

The Witness: Where it says the wiping arm is caused to wipe the inside lower portion of the top material, to engage the top material and urge it toward the adjoining portion of the tonneau.

The Court: Why does it happen that you stop right there?

The Witness: And thereby provide a watertight seal between said top material and said tonneau.

The Court: Yes. I want to make a ruling at this time if we are going to consider Claim 6, the word "grip" [894] means just what you said, adding the clause I mentioned which you had stopped at.

Q. It is my understanding then you are reading the word "seal" into Claim 6?

The Court: I am.

Q. Have you had an opportunity to analyze the various references upon which defendants have been relying from the point of view of anticipation of the Mackie-Duluk patent? A. Yes, I have

Q. Would you please discuss the results of your analysis? A. In analyzing these references to determine if any of them contain all of the teachings of Mackie-Duluk and disclose all of the elements of Mackie-Duluk, I have determined that there are ten features involved in the Mackie-Duluk invention.

First, a low body structure having a panel.

Second, a folding body structure.

Third, flexible top material.

Fourth, a downwardly extending flap on the top material at the rear quarter.

Fifth, some means for securing the flap to the inside of the panel below the top of the body.

Sixth, the feature that the top material or the flap spreads and adjoins the inside top of the body when the top is raised.

Seventh, a rain trough on the panel below the body top [895] to which a flap is secured.

Eighth, a wiper arm which is secured to the bow structure at one end.

Ninth, a guide means for the other end of the wiper arm.

Tenth, this is a second feature, a wiping boss on the wiper arm. I include that. It is included in Claim 9 of the patent.

• • •

The Court: Before we do that I will like the witness to tell me what he means by "spreads and adjoins."

The Witness: That language is taken from the language of the patent, your Honor. As I understand it, referring for example to Claim 1, the downwardly extending flap which is designated 28 is in a folded condition, when the top is down. At that time the portion of fabric which will be in the raised position extended along the body line of the car, is pleated, if you will, or folded upon itself, [896] As the top is raised, that material is drawn forward by the bow structure and stretched to some extent, perhaps between those fastening points at the rear of the car and the bow structure, so that it is spread and straightened out and positioned adjacent to the belt line of the car, in the rear quarter.

The Court: You have told me everything except what I wanted to know.

The Witness: I am sorry.

The Court: It isn't your fault, it is the fault of my question. Is there any contact, is there a necessary contact implied in your word "adjoin"?

The Witness: Not as I interpret the term, your Honor. As I interpret the word "adjoins," it means positions adjacent to.

The Court: That is a relative term, then.

The Witness: Yes.

The Court: In other words, this building is adjacent to the building across the street, in one sense?

The Witness: Yes, in one sense.

The Court: Is that the sense you meant?

The Witness: Well, I think it would have to be a little closer than that in this construction.

The Court: How close?

The Witness: I do not know that that can be defined [397] in terms of—

The Court: You go ahead and tell me what you think.

The Witness: As your Honor said, these terms are relative and when we are speaking of a construction of that type, we have to determine what is meant by "close" or any other relative term.

The Court: Yes, aided of course by such language as we may find.

The Witness: That is correct, your Honor.

The Court: I am wondering just where you come out.

The Witness: With respect to the word "adjoins"?

The Court: Yes. How closely can you get any help from the language?

The Witness: No, I don't believe this term is defined in the specification.

The Court: Are we talking about the belt line of the car? I want to make sure we understand each other. Are we talking about the area of the belt line of the car?

The Witness: Yes, that is what I was referring to.

The Court: Yes. And the other side of that area is defined when the top is raised by the wiper arm?

The Witness: Yes, that is correct.

The Court: The question we are discussing narrows down to whether Mackie-Dulak specifies that that area shall be loose, firm or some other term.

[898] The Witness: Perhaps I can clarify at least what I had in mind, your Honor. I thought when you asked me about the meaning of the language, spreading and adjoining, we were referring to what happens to the fabric without giving any consideration to the presence or absence of the wiper arm.

The Court: All right. You are quite correct. You might have drawn that conclusion. That is why I am in doubt. I did not mean that. I meant, what does the patent specify in connection with the action of the wiper?

The Witness: Well, the wiper arm is described quite clearly in the patent and I believe in my previous testimony we referred to the language in Column 3 of the patent where it describes the wiper arm as pressing the fabric against the in-leaning fin.

The Court: Of course we have some claims here, I have in mind Claim 8. It is a question of torsion as distinguished from pressing it in.

The Witness: That language is strictly broader.

The Court: I am asking you what you have in mind as to your interpretation of this patent.

The Witness: With respect to the provision of a seal?

The Court: Yes.

The Witness: I believed I testified initially in my interpretation of a seal, it was at the belt line.

The Court: Yes.

[899] The Witness: It was a positioning of the fabric close enough to the belt line so that you would limit the amount of water which could enter at that point to an amount which could be carried away by the trough or second inner seal.

The Court: That is rather an elastic definition, isn't it?

The Witness: Yes, your Honor. I don't think I can define it in terms of inches.

The Court: No, I did not expect you to. I wasn't asking you to. I am asking you, if you can define it in terms of whether the connection was to be firm or loose, open or closed, and not looking at with a microscope, but some practical fashion, having in mind the testimony that the Ford Motor Company was content with a 1/8th inch opening.

The Witness: In my view, your Honor, assuming that the 18th inch opening was found by experience to limit the amount of water which could pass the belt line to an amount which would be carried away by the trough without spilling over and reaching any water damageable parts, then in by view the positioning of the fabric within 1/8th inch of it would constitute a seal.

The Court: That would be a very happy view for the plaintiff. In fact, I might conclude by saying, you would not be doing justice to Mr. Pollock if you did not consider in your testimony the possibility we are not going to do this.

[900] The Witness: It would be nice if we could always get people to agree with us.

The Court: You can consider the other possibility as well.

Mr. Pollock: May I comment on this?

The Court: Yes.

Mr. Pollock: On the question of what "adjoining" means, I believe some insight might be gained from reading the last clause on Claims 5 and 8.

The Court: No, I would not get any help from that. I have read them.

Mr. Pollock: You don't wish any more comment in that regard?

The Court: Any more comment, yes, but that particu-

lar comment does not impress me, that is all I would say.

Q. In regard to the question of seal, it is my view at least that the main purpose of the invention is to get an automatic seal at the rear quarter, which is the title of the invention, one that need not be manually fastened or unfastened when the top is raised or lowered.

The Court: I understand your overall claim.

Mr. Pollock: In that regard.

The Court: I am speaking specifically, when the witness testifies, that is why I brought this up at this time. When he testifies with relation to these other prior references, [901] I want to know what kind of seal he had in mind. "Adjoining" relates to the same thing, another way of saying the same thing.

Mr. Pollock: I don't believe so. I consider the word "adjoining" to be quite independent of the word "seal."

Taking your 1950 Chevrolet—your 1950 Plymouth, we have a loose flap at the back portion which is snapped on.

The Court: Yes.

Mr. Pollock: If that flap is laying over the outside, I would say we have a seal there in that water cannot get into the car. If it is hanging merely inside it, the two are still adjoining one another, we have no seal.

The Court: The important question is, do you have a seal within the meaning of Mackie-Duluk. Maybe it isn't the only question, but I consider it to be one.

Mr. Pollock: I believe the testimony will show Mackie-Duluk is not trying to get a better seal from the point of view of water shedding, than your 1950 Plymouth. I believe the Court can take notice, had he snapped the top—

The Court: In that case he would have a perfect seal, except in a hurricane.

Mr. Pollock: Exactly. The whole purpose was—

The Court: I don't think—I have Mr. Pickard's Ford with a 1/8th inch opening.

Mr. Pollock: I think not, no water can get into the [902] passenger compartment.

The Court: Through 1/8th of an inch?

Mr. Pollock: Through the passenger compartment.

The Court: You are talking about the whole case rather than the meaning of this particular language.

Mr. Pollock: It is my understanding from Mr. Brosens' testimony he considered the trough and the cloth fastened to it as a seal. He quite clearly testified this is a seal which might not be manually fastened or unfastened.

The Court: I did not hear him say the patent described is as a seal.

Mr. Pollock: He said he interpreted that as a seal, if that is a correct assumption, we have a seal at the rear quarter, whether it be at the belt line or below, which will properly prevent water from coming into a compartment and which need not require any human interposition.

In that respect we have an automatic seal at the rear quarter. You need not snap your fasteners or do anything else and water cannot damage the interior of your car.

This is a structure these people provided, the manufacturers themselves, the trough is in the car. Certainly it isn't meaningless, it was there for the express purpose of making sure that water cannot—

The Court: They provided something else. Maybe it wasn't needed. They leave you with a problem.

[903] Mr. Pollock: I believe it would be necessary, I believe it is important to get the fabric—

The Court: Mr. Booth said he was happy with a 3/8ths inch opening.

Mr. Pollock: I am not sure how happy he would be but for this suit.

The Court: Strike out "happy." He was willing to put up with it.

Mr. Pollock: That is true, that is what he did testify.

The Court: At the present time I was merely seeking some definitions, in my mind, as to what the witness has in his.

Mr. Pollock: I would much prefer to clarify the question of definition at this point, so that his testimony can be clearly understood.

The Court: I don't believe I have any question, so that there won't be any question in your mind, I think he has told me a seal in his understanding was any opening small enough to limit the water to where it can go down and be carried out by the trough.

Mr. Pollock: In that regard he is implying the cooperation I implied. I said—

The Court: I suggest to him if he wanted to do a good piece of work for your client, he better taken those possibilities into consideration in connection with his [904] testimony. There are two possibilities; one being the one he mentions and the other that the seal be a tight connection.

Q. Can you analyze the claims in that regard? A. I assume by "in that regard," you mean in discussing the references, we are also considering something, a seal in which there is a space through which water can enter.

Mr. Pollock: Yes. But I would understand from the Court's comments that you could consider a structure such as the trough in cooperation with such a space. Is that correct, your Honor?

The Court: What I am saying does not relate simply to this question, but other questions which I assume you will put to the witness before the day is over.

In other words, I am merely advising you of the possibility of my construing "seal" as something different from what you construe it.

Mr. Pollock: I understand that.

The Court: It relates to everything you want to ask him.

Mr. Pollock: Yes. In order to clarify this testimony, would you divorce yourself from the question of seal momentarily and merely consider the structural elements and then go back over the patents from the point of view of seal? A. I would be happy to do that.

Of the ten elements or features of the Mackie-Duluk [905] patent which I mentioned, all of the prior art references relied upon disclose the first three, namely, the bow structure, the folding bow structure, and the flexible top material.

Those three elements have been conventional in substantially all convertible tops which have been ever built. The fourth element, namely, the flap extending down inside of the vehicle body at the rear quarter and the securing means of the fifth element, I do not find in any of the references.

A flap extending inside of the body panel is shown in the Ackermans patent and perhaps also in the Best patent.

But there is no means in either patent for securing the flap inside of the panel below the top of the body.

The sixth feature of having the top material spread and adjoin the inside top of the body is shown in the Ackermans patent, where the flap does spread and adjoin the inside of the top of the body, when the top is raised.

The seventh feature, namely, a rain trough to which the top material is secured is not shown in any of the references.

There are of course rain troughs shown in several, such as the Bessonneau patent but in no case is there a flap of top material secured to such a rain trough.

The eighth element, the wiper arm I do not find disclosed in any of the references.

[906] I might say in that connection that I am defining

a wiper arm in accordance with the patent to mean an arm or element which actually moves over the surface of the fabric as the top is moved, from its lower to its upper position.

Invariably in the absence of a wiper arm there is of course no guide means for the wiper arm and no wiping boss on the wiper arm, so that those elements which constitute the important features of the Mackie-Duluk invention I do not find in any of the prior art patents referred to here.

Q. Would you go into the question of seal, first of all considering which of the patents teaches seal from the point of view of firm contact? Is that your understanding of the analysis you would like, your Honor?

The Court: Yes, in this connection. There are other entirely different inquiries you may make later or may not. I am not asking you to make them.

Mr. Pollock: The essential question after this would be the question of repair versus reconstruction.

The Court: All right, I am not directing the scope of the examination.

The Witness: With respect to a seal, the several Bessonneau patents, the several Bessoneau United States patents all seek to achieve a seal between the fabric and the body line of the car not by attaching the fabric to the body itself but by attaching it to a movable hoop element [207] which is moved as the linkage moves, to carry the edge of the fabric or individual element itself, or both, into contact with the car adjacent to the belt line.

If the hoop element and the belt line of the car can be made to correspond exactly in configuration and size, they would achieve a seal between them.

If there is any variation there would of course be the possibility of gaps of openings the same as those which

occur with the Mackie-Duluk structure and which would admit a certain amount of water.

Q. Where would that water go in the Bessonneau? A. In the first Bessonneau, No. 2,185,581, the water is intended to be caught by the troughs 79 and 80. There is, however, in this construction nothing which I can find to direct the water into those troughs.

Q. From your understanding of the patent is there a possibility the water might be so directed into the troughs? A. I would think very definitely and particularly with reference to the trough 79, which as shown in Figure 4 must lie outside of the bow structure when it is folded so that it would presumably be beyond the belt line of the car in a vertical direction.

Q. Would you adopt the two definitions that have been given this morning of seal, and characterize this as one or the other or neither of such seals? [908] A. I would say Bessonneau obtains a seal at the belt line in the same sense a seal is obtained in the belt line in the Mackie-Duluk patent.

The Court: In your interpretation of it.

The Witness: Yes, in my interpretation. Bessoneau does not, however, have the second or internal seal provided by the cooperation of the flap with the trough.

* * * *

[913] Mr. Wolf: With respect to the deposition of George Shapiro of September 5, 1957, I should like to offer the following pages:

Page 2, from the 8th line from the bottom to the bottom; all of page 3; all of page 4; all of page 5; page 6, line 1 to page 6, line 11; page 6, line 14 to the second line from the bottom; page 7, line 8 to the 6th line from the bottom; page 8—I'm sorry. Page 7 I would like to insert. Page 7, line 8 to the bottom of the page; page 8, line 1 to line 9; page 9, line 2 to the 3d line from the bottom; page 10,

line 10 to the bottom of the page; page 11, line 1 to line 8; page 11, line 11 to the bottom of the page; page 12, lines 1 to 4, and lines 12 to the bottom of the page; all of page 13; all of page 14; page 15, line 3 to the bottom of the page; page 16, line 3 to line 14.

[917] Q. What is the next patent you would like to discuss? A. The next one is the Bessonneau British patent No. 447,641.

In this patent, from the drawing it appears that the fabric extends below the belt line, in the sides or rear quarters of the vehicle body.

I find no indication in the patent that the fabric is attached in any way at the rear quarters. There is no [918] showing of the rear quarter construction.

I find it impossible to determine whether or not there is any seal or any sealing structure present.

Q. Can you make any more specific comment about this reference than that, if you are able to? I am not trying to lead you out, in that regard. A. The disclosure of the whole patent, in so far as the fit of the fabric into the rear quarters is concerned, is so vague it is almost impossible to go much farther than that.

Q. I see. What is the next patent? A. The next one in order discussed by the defendants is Ackermans patent No. 2,549,153.

In this patent in the rear quarter a flap 130 is provided which is connected at the forward end to the folding bow No. 22 and at the rear end to the belt line of the body.

When the folding bow is moved counterclockwise as seen in Figure 9 in raising the top, the flap 130 is stretched longitudinally and is intended to be pulled against the side of the body adjacent to the belt line.

Sealing elements as shown in 128 in Figure 10 are provided on the flap, which are intended to be drawn into

engagement with the belt line of the body to effect a seal.

The flap is completely unattached to the body in any way.

Q. Does this unattachment or disattachment have any important [919] aspects as far as you are concerned? A. Yes, the seal provided by Ackermans in stretching the fabric parallel to, or along the belt line, could not, it seems to me, be a very tight pressure and the fabric being cut on the bias at the quarter as has been discussed in the testimony is stretchable so that it would be quite impossible if not probable, that due to wind pressure this might be pushed into the extent where water could enter in excessive quantities and even in a direction which would miss the trough completely.

If that occurred the water would apparently reach water damageable parts of the vehicle.

* * *

Q. Does the problem of stretching at all come up in regard to the question of seal, the question of shrinkage, I meant? A. Well, yes, in this type of construction if the fabric should shrink in the rear quarter, it would tend to pull up on the flap element and it would not have to pull very far before it pulled the upper sealing strip 128 above the belt line.

In that event, an opening would be left which would be undesirable.

* * *

[920] Q. Does Ackermans accomplish sealing by the same structure that Mackie-Dulak does? A. No, in Ackermans the sealing depends entirely upon tension and the flap element 130 parallel to the belt line.

In the Mackie-Duluk patent the sealing is effected by pressing the fabric toward the belt line through the wiper arm 10, as shown in Figure 1.

Q. Does the attachment of a flap enter into this question of sealing at all? A. Are you speaking of Ackermans?

Q. Ackermans vis-a-vis Mackie-Duluk. A. In the construction shown in Ackermans it would be impossible to attach the fabric at its lower edge to the body because the fabric must be attached at the folding pillar 22, in order to obtain the stretch that Ackermans talks about.

If it were also attached at its lower edge to the body, when the pillar 22 is folded back the fabric would have to give somewhere, it would be torn loose.

Also if a flap of approximately the proportions shown in the Ackermans patent were secured to the body at its lower [921] edge, that securing would take away all meaning to the stretching effect that is described in the patent.

* * *

A. The next patent discussed is the Best patent No. 2,289,173.

So far as sealing is concerned, the Best patent teaches only the provision of extending the fabric a short distance on the inside of the body at the rear quarter and connecting it to the body through detachable snap fasteners or detachable fasteners of some sort.

In addition Best provides at the rear quarter extending over the outside of the belt rail a flap as shown in 61 which is similar to a shingle element in that water running down the fabric will tend to run over it and be carried to the outside of the body. I think that is all that Best is relied on for.

Q. Does Best have a seal? I think we are discussing seals here. A. The shingle structure 61 in Best keeps the major part of the water from entering the body and the portion of the fabric which extends inside and is attached to the inside of the belt rail also engages the belt rail.

These two cooperating together tend to form a seal at the belt rail.

Q. Is Best an automatic seal? [922] A. No, Best re-

quires manual attachment and detachment when raising and lowering the top.

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[927] Q. Mr. Booth, do you have an opinion as to whether it comprises a repair or reconstruction of the Mackie-Duluk combination to replace an original top fabric in a 1952-1954 Ford or a 1950-1953 General Motors car with an Aro replacement top fabric of the proper part number for that car?

[928] Mr. Wolf: Objection, your Honor.

• • •

[929] Mr. Wolf: I was about to say, presumably an expert in the field of patents.

However, the question presupposes, being an expert in the field of replacements. Actually in this area of installing these replacement fabric tops, I don't think you can divorce the knowledge of an entire industry from this problem.

• • •

Mr. Wolf: My understanding of the Goodyear case which I referred to in several briefs says in determining [930] the question of repair as compared with reconstruction, you must take into consideration the problem as a matter of common sense, you have to look at all the facts.

The Court: I will agree to that. I was just resting my hypothesis, when you said "the opinion."

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[931] *Re-cross-examination by Mr. Wolf*

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[933] XQ. You mentioned that this particular patent application to Ackermans, the patent application to Mackie, were handled by the same individual? A. Yes, that is correct.

• • •

[936] A. Well, in so far as the essential elements of the Mackie-Duluk patent are concerned, I don't think that the

Bessonneau references show any more of those elements than Campbell, for example.

XQ. You can see nothing in either of the group Bessonneau references which might perhaps be more relevant in considering the scope of Mackie than the Campbell and British references? A. No, I can't say that I do, really.

XQ. Would you consider the Patent Office remiss in their duties [937] in failing to cite some of the Bessonneau references in the prior art? A. Not particularly, because I don't believe that the things which were presented in the Mackie-Duluk applications are anticipated by Bessonneau.

. . . .

[938] XQ. Now, I should like you to turn to the claims of the Mackie patent. Would you indicate to me where there is any limitation to the shape of the bow or the length of the bow—pardon me—the shape of the wiper arm or the length of the wiper arm in the claims? A. There is no specific limitation to that effect.

XQ. Could you point to any specific limitation as to the length of the seal? A. There are none.

XQ. Could you point to any specific limitation as to the specific operating linkage? A. There are none of those, either.

XQ. In other words, you would agree with me when I say that, as to the wiper arm and seal and linkages which operate the wiper arm, any broad variety of linkages and wiper arm come within the scope of the claims; is that correct? A. Well, the wiper arm, I believe, in all the claims is required to be operated by the folding bow structure.

XQ. Well, with that limitation, there is quite a broad scope which would cover a great variety of wiper arms and shapes and linkages; isn't that correct? [939] A. Yes, that is correct.

XQ. Is there any limitation as to the shape of the flap

on the fabric which comes down into the body of the car? A. Not as a shape, no.

XQ. Is there any limitation which requires that the fabric be secured along the belt rail and the back and down below the belt rail at the side quarters? A. The latter limitation—

XQ. No, I'm stating— A. The first limitation you mentioned is not in the claims.

XQ. In other words, there is no limitation as to where the back portion is to be secured? A. That is correct.

XQ. Except as to claim 8, I believe it is, is there any limitation that the fabric had to be secured to a trough. A. I believe that is also in Claim 9—is it not? No, it is not in Claim 9. Claim 8 is the only one.

XQ. Is there any limitation in the patent—looking now at Claim 2, and I'm looking at this for comparison purposes—I'm sorry. Let us make it Claim 3. In line 4 it says, "and having the top material at the rear quarter extending down and supported by said panel. . . ." Is there anything in the patent which would clearly refute the specific language in contention, that this could merely mean touching and not necessarily absolutely fastened to the panel? [940] A. I think we discussed that when I was on the stand before, Mr. Wolf, the meaning of the word "supported", and I told you then that, when I first read it, I had construed it to mean attached; and I believe I agreed with you that it might possibly be construed more broadly.

XQ. It might be construed, for example, as the type we saw in the Ackermans patent where the fabric is stretched right up against the body of the car in the flap area and, perhaps seemed to be supported by the panel.

Mr. Pollock: I object, your Honor. I mean, if this is a question of argument, and it would seem this is merely argumentative, as to whether or not Ackermans does show something that is supported by—

The Court: Yes, I will sustain that.

XQ. Now you cited ten different elements that you considered in this Mackie construction? A. Yes.

XQ. Apparently, though, you didn't consider them all to be essential; is that right? A. Well,—

Mr. Pollock: I believe the word "essential" should be clarified, your Honor.

The Court: All right. If you have any troubles about it—what do you mean by it, Mr. Wolf?

Mr. Wolf: I mean essential to—well, I will re-phrase [941] it.

XQ. Essential to the claims? A. No, no.

XQ. Even the broadest claims? A. No.

XQ. Which of these do you consider as not coming within the scope of the broadest claims? A. Well, I think that all of the elements come within the scope of this claim, but I don't think that all the elements in their details are essential to comprise what is called for by the broadest claims.

XQ. Which of those can you dispense with? A. Well, several of the claims, for example, do not call for the rain trough. Those would be broad enough in their terms to include a construction in which the flap is atttached to the panel by some means other than through a rain trough.

XQ. How about the guiding? A. Yes, that is not included in some of the claims as a specific element.

XQ. That would not necessarily be an essential limitation under the construction? A. Those claims all call for the wiper arm. Claim 3, for example, says the wiper arm is operable simultaneously with the bow to accomplish its various purposes. Claim 4 says the wiper arm is attached at one end to the bow. Those claims are claims [942] like Claim 3 and are drawn more broadly to cover any means by which the wiper arm is mounted and controlled and moved in the manner called for in the claims.

XQ. Do you see any other that might be eliminated? A. Well, the wiping boss.

XQ. All right. You consider that to be—

Mr. Pollock: Your Honor, I am completely confused. I don't know where this is all going. I don't see the pertinence of it. The claims are written and they are in the case and they are here for this Court's interpretation. We are not trying to rewrite in the claims at this time.

The Court: Well, I suppose it's about the same pertinency as your original asking him to list them.

Mr. Pollock: List the elements?

The Court: Yes.

Mr. Pollock: I didn't ask him to list them, your Honor. I asked him to analyze them in the light of the art. He chose to list them.

The Court: All right. At least, isn't Mr. Wolf entitled to show any irreducible minimum in the witness' mind? I don't know just where it's going to get—by why not?

Mr. Pollock: Well, if that is the purpose, let him proceed.

The Court: What is your purpose, Mr. Wolf?

Mr. Wolf: Your Honor, I think brother counsel stated [943] at one point that if he had several things and one of the claims leaves out an element, then it is presumably held under patent law that element is no longer essential to the combination. In the absence of—

The Court: For that claim, you mean?

Mr. Wolf: The combination of the whole invention no longer is—

The Court: You mean, if I put in a claim with three items and put in another claim with only two, that knocks out my claim of the three items?

Mr. Wolf: It doesn't necessarily knock it out but—

Mr. Pollock: I believe the word "use", your Honor, is crucial. The claims are still of different scope, one being

infringement only when you have all three elements, and the other being infringement if you have at least two. However, when we are concerned with whether or not a given element is the essence of the invention, whether it is crucial, I believe the law is and does say that such a crucial element must appear in every claim, and in the absence of such appearance in every claim there is at least the presumption it is not crucial. I would defer to Mr. Booth in this regard, possibly, who has much more expertese in it than I have.

The Court: I know, but we have decided he can't tell us. Well, I will let Mr. Booth go ahead.

XQ. Will you agree with me, Mr. Booth, that the downward flap [244] which you have listed is of the same general nature as the downward flap of the Ackermans' patent? A. Broadly speaking, yes.

XQ. Broadly speaking—I presume you mean it is used to effect in part a seal at the body line; is that correct? A. Yes.

XQ. Would you also say it is used in part to direct water into a trough? A. Yes.

XQ. Now you also spoke of means for securing the flap below the body line on the car. Is that correct? A. That is correct.

XQ. Presumably you want to secure the flap of the fabric down below the body of the car so as not to give—well, let me coin an expression—of giving the fabric a shirttail appearance; is that correct? A. Well, as I understand it, there are several reasons for securing the fabric. Do you want to go into those, Mr. Wolf?

XQ. Well, can you briefly list what you consider to be the purposes of securing the flap? A. Well, one reason is from the standpoint of appearance, and you say, to keep the fabric drawn taut at the rear quarter so that it will have good appearance.

XQ. All right. What is the second? A. The second is that by attaching the fabric to the rear [945] quarter you insure that the fabric will always be in place and that it will not lie—

XQ. Isn't that the same one, the same as the first?

Mr. Pollock: Let him answer.

A. No, sir, I don't think so.

XQ. Explain the difference. A. It could be slack enough and still be secured so that it can't fly completely out of the car. I believe there was some testimony in the case that if it gets detached and the car is driven at a relatively high rate of speed, it would be quite possible for the wind pressure within the car to blow it completely on the outside. Another reason is that with the flap attached in the car, access to the interior of the car is prevented.

XQ. Now let me ask you a question. Are you familiar with the Best patent? A. Yes.

XQ. Is it possible, when that top is up and the car is moving for the fabric to fly loose? Isn't it secured for the same purpose? A. Yes. When the fasteners 59 are snapped, it is impossible for the fabric to fly loose at the rear quarter.

XQ. It serves the same purpose, then, as a means of securing? A. In that respect, yes.

XQ. You stated the top material spreads and adjoins. Presumably this is a little bit stated in the terms of function somewhat. [946] But would you agree with me the Ackermans patent, to the extent of the words spreads and adjoins is definite; also spreads and adjoins? A. Yes.

XQ. Now, getting down to the wiper arm, can you indicate what you consider to be the function of the wiper arm? A. Well, the wiper arm, according to the testimony in this case, has two functions. One is to hold the fabric against inward displacement, and the second is, to push the fabric out toward the belt line of the car.

XQ. Those are the two functions; correct? A. Yes.

XQ. All right. Turn to the Bessonneau patent and, for example, the first Bessonneau patent we looked at. Will you look at hoop number two? A. Yes.

XQ. Now we have presumably accepted that hoop 2 has fabric attached to it? A. Yes.

XQ. What I might say, you have also considered the second Bessonneau patent, 2157783? A. That is right.

XQ. And that is hoop 60, and I believe we have fabric attached to that hoop; am I correct? A. Yes.

[947] XQ. In both those cases does not that 60 in the second patent and hoop 2 of the first prevent the fabric from being pushed inward? A. Yes.

XQ. That is to prevent access? A. Yes.

[949] XQ. Yes, that's right. I believe you said that a trough was not suggested in the prior art, or did you say a trough was not suggested to which fabric was attached? A. The latter. That is right.

[953] XQ. Turn to the 447, 641. A. All right.

XQ. Do you question that there is a fabric on the sides of this construction?

The Court: He said there was.

Mr. Wolf: Pardon?

The Court: He said there was.

XQ. Do you agree that the lower edge of the fabric at the sides is indicated by the double line, the upper double line? I think we referred to that as 5-A. A. That is correct. No, I don't question that.

XQ. Will you agree that in all probability Figure 3 would show a forward edge to the fabric of the side quarter or would show a variation in the double line, the upper one of which is indicated in 5-A, if the fabric were not in some

way attached [954] either at the bottom or at the forward edge of the fabric?

Mr. Pollock: I am afraid I don't understand the question.

The Witness: I understand the question but I have no knowledge on which to base an answer, and answer to it.

I might say this, in answer to that question, Mr. Wolf, looking at this a little further, if the fabric were attached to the bow member 1 which I believe was Mr. Brosens' testimony, the line 5-A would apparently appear straight as it is shown.

Mr. Wolf: I see.

Mr. Pollock: What was that answer?

The Witness: I said if the fabric were attached to the bow member 1, at the lower edge here, its line would apparently appear straight as it is shown in the drawing.

[955] XQ. Your interpretation of the Mackie patent as you set it forth at the end of your testimony, you stated that in effect, as I recall, he was trying to achieve an automatically operated top which effected a seal at the side quarter. A. At the rear quarter.

XQ. At the rear quarter. I presume you do not contend that Mackie was the first to have done this? A. Well, so far as the testimony here has shown, it was the first commercial construction.

There were previous attempts.

XQ. I am asking you whether it had been done before. A. Do you mean done on paper?

XQ. Done on paper. A. Yes, it had been attempted on paper.

XQ. By whom? A. Bessonneau, for example.

XQ. How about Ackermans? A. Yes, Ackermans.

[956] Mr. Pollock: We are speaking of just that one.

the title of the invention rather than the structure; is that my understanding?

The Witness: Well, in answering the question it was my understanding we were talking about a top that was automatic in the sense it could be raised and lowered without any manual connection or disconnection of any fastening. Is that the question?

Mr. Wolf: Yes. You agree with me Ackermans incorporated, Ackermans provided a structure which accomplished this particular function?

The Witness: Yes.

XQ. Couldn't you characterize the Mackie patent concept, the principal concept then, as one in which Mackie was really concerned with effecting a really good seal at the rear quarter, the rear side quarter? A. I think his primary objective was to provide a top which could be raised and lowered automatically in the sense we have used the term.

XQ. You just told me that other people had done this. A. That is right.

XQ. Isn't it proper to assume or consider this device of Mackie's as something which is going beyond that step? Are you going to say that is all he was interested in doing? A. I was trying to say I think the automatic top was the [957] prime consideration in the patent as I read it.

XQ. What you are trying to say, am I not correct, what Mackie was trying to do was effect a really good seal and an automatic raising and lowering top? A. I think there had been good seals before, probably as good if not better than the seal obtained by the Mackie-Dulak construction but they were not automatic.

XQ. There were seals at the rear quarter which were automatic? A. Yes, that is correct.

XQ. Isn't the advance over those seals in the rear quarter at least to the extent you are claiming there is an

advance one in which are merely saying, all we want to do is get a better seal in automatically raised and lowered tops? A. I think it was a secondary consideration.

XQ. It was secondary to getting a good seal. You mean to say what Mackie wanted to do was merely get an automatic raised and lowered top? A. That was his prime consideration, yes.

XQ. How do you account for all the recitations in the claims and file wrapper, of this business of a weathertight seal which apparently he made so much of? A. One of the problems in any top is the provision of a watertight seal in the rear quarter. Mackie was trying to provide a structure simple enough to be built practically and used practically in commercial manufacture of automobiles to obtain [958] an automatic top and which would at the same time retain a seal structure in the rear quarter which would be good enough, not necessarily better than the seals which had preceded it.

XQ. It was an integral part of his consideration, that we do get a good seal? A. Oh, yes, that is necessary.

XQ. In the body line? A. Well, at the rear quarter.

XQ. Part of that is the body line? A. Part of it, yes.

XQ. I would like to ask you a couple of questions about the Ackermans construction. I would like you to indicate to me whether you agree that the Ackermans structure shows the following elements.

It shows a convertible automobile body automatically controlled folding top therefor, does it not? A. Yes.

XQ. It shows a tonneau having a body panel, does it not? A. Yes.

XQ. A folding bow structure supported by the tonneau? A. Yes.

XQ. Flexible fabric top materials supported by the bows? A. Yes.

XQ. It has fabric material on top at the rear quarter

extending down inside and below the top or the belt rail or metal body [959] or tonneau? A. Yes.

XQ. It has top materials spreading and adjoining the inside and the top or side of the tonneau when the bow structure is raised? A. Yes.

XQ. It produces a weather seal between the top material and the top and side of the tonneau? A. Yes.

XQ. It fastens the fabric top to the body? A. You are talking about—

XQ. Talking about Ackermans. A. The total top?

XQ. Yes, sir. A. Yes.

XQ. It shows a rain trough secured to the panel of the car? A. Yes, sir.

XQ. With the fabric or top extending at least partially down below the top of the metal body? A. Yes.

XQ. With the trough adapted to receive water passing between the fabric and the metal body? A. Yes.

XQ. And it has a deformable element or means effective to afford a weatherproof seal positioned between the adjoining [960] surface of the belt rail and folding top material when the bow is raised? A. Yes.

XQ. One more question. Does the Mackie patent at any place describe or show a complete fabric top? A. No.

XQ. It only shows small portion of it, is that correct? A. That is correct.

XQ. One more question. The portion of the fabric which is shown in Mackie deals substantially, exclusively with providing a seal at the rear quarter, is that correct? A. It shows—yes, I think that is correct.

Mr. Wolf: No further questions, your Honor.

Redirect Examination by Mr. Pollock

Q. Mr. Booth, is there any patent that has been discussed here including the Ackermans patent which includes an elongated flap extending down inside the car permanently fastened in place? A. No.

Q. Is there any patent here which shows a wiping arm? A. No.

Q. Do those two limitations appear in every claim in this case? A. Yes, they do.

Q. I ask you whether or not the word "seal" appears at every [961] claim in this case? A. In every claim that is in suit.

Q. In every claim in the case. A. In the Mackie-Duluk patent?

Q. Yes. A. We previously discussed Claim 6, in which that word does not appear. Claim 10 does not use the word "seal." Oh, yes, it does, I beg your pardon. Claim 6 is the only one.

The Court: May I call counsel's attention to the title of the patent?

Mr. Pollock: That is true, your Honor, we agreed that is the case.

The Court: You have to agree. I was just calling your attention to it.

[962] Q. In speaking of the Bessonneau patent you were directed to the hoop 2. A. Yes.

Q. Is it your understanding that acts as a wiper arm? A. No, that is a securing element to which the fabric is permanently and rigidly attached.

[964] Q. Have you had any occasion to work with patent drawings? A. Yes.

Q. Have you ever had them prepared? A. Yes.

[965] Q. Could you characterize them as very accurate? Withdraw the question.

Would you please discuss the accuracy of the patent drawings in general? A. Patent drawings are intended only to be illustrative. If they are accurate in the sense that mechanical drawings are accurate, it is pretty much ac-

cidental. There is no requirement that they have that degree of accuracy and the majority of them do not have it.

Q. Is it customary to draw any structural inferences from the drawings alone?

* * *

The Witness: In general, No, because, as I say, the drawings are supposed to be explanatory and unless the specific structure of an element or part is critical it is usually not even illustrated in any great detail.

* * *

[967] Q. From your understanding of the art, did anyone effect a convertible folding top with automatic seal at the rear quarter, to use the title of Mackie-Duluk by the structure shown by Mackie-Duluk in combination? A. No.

Q. You spoke of the fact that you understood Mackie-Duluk were trying to get a commercial structure, a feasible type structure for commercial production? A. Yes.

Q. Is there any feature of this structure which you believe [968] lends itself to that purpose? A. Of the Mackie-Duluk structure?

Q. Yes. Any feature, anything about the structure as a whole? A. The principal feature of the Mackie-Duluk in that respect is its simplicity.

The bow structure according to the patent and according to the testimony is purely conventional. In other words, the same bow structure that had previously been used with snap fasteners can be retained by the addition of the flap extending down inside the body and secured below the belt rail and the wip arm consisting in the form of Figure 1 of two simple links or in the from of Figure 7, of one arm pivoted at one end and a bracket to receive the other end slideably, all of the objectives were achieved so that it became very feasible as a commercial matter to adapt the existing top structures on a production basis to the Mackie-Duluk invention.

Re-cross-examination by Mr. Wolf

[969] XQ. You would consider the Bessonneau patents, then, to be somewhat cumbersome, is that correct? A. I would say they are far more complex than the Mackie-Duluk.

[970]

EIGHTH DAY
Court Room No. 6
Federal Building, Boston
Thursday, August 28, 1958
10:00 a.m.

EDWIN C. PICKARD, Recalled

Direct Examination by Mr. Pollock

Q. Will you state your name? A. My name is Edwin C. Pickard.

Q. Are you the Mr. Pickard who testified earlier in this proceeding? A. Yes, I am.

Q. Have you seen a structure of the type which was described in Mackie-Duluk in commercial automobiles? A. Yes, I have.

[971-972] Q. Will you state to the Court what you understand to be the important purpose of the aspects as you have seen it on the cars that you described? A. The construction that we are talking about is a much needed, long desired arrangement to provide a real automtaic top at the rear quarter of the car. This arrangement provided a flap or extension to the rear quarter which was anchored below the belt and was anchored and attached above. This condition was a tremendous improvement over what had been the prior condition because it was a completely auto

matic top arrangement as we understand it now in the industry.

I would like to state a little bit more about this from the engineering point of view because I feel it is a point on which I am qualified to speak. This arrangement I happened to be very familiar with because at the time I was in contact with—

Mr. Wolf: Your Honor, I must object to this.

The Court: On what ground?

Mr. Wolf: On the ground, first, of relevance. I don't think this is strictly relevant rebuttal testimony. Then there is the question of the time that elapsed here.

[973] The Court: If it took them a long time to figure it out, and they were, I would assume, among the top people in the country and the interested people, to figure it out—

Mr. Wolf: There is always the question as to figuring out what?

The Court: Figuring out what they have got, what else can that be, what else can they be figuring on.

* * *

[974] Q. I believe you were speaking of how long the people were working on this problem and the like A. Yes, I was discussing this device and the problems involved. The general industry had been for years working on the problem of sealing or closure.

Mr. Wolf: Objections, your Honor.

The Witness: At the rear quarter.

Mr. Wolf: How can he know what the industry is working on.

The Court: He has testified at length in his original testimony he kept himself familiar with what the industry was doing. I will admit they could be doing secret work, he would not know about. Are you suggesting he could not know what they were doing openly?

[975] Q. You were speaking of what the people were doing. A. I said the industry in general had been endeavoring for years to develop a better means of attaching the top fabric at the rear quarter.

I am qualified to say that. I worked with the people who make the fasteners. I worked with the people who make the fabric. We worked with the vendors who make other parts of the cars. They are constantly coming into the office. You would keep in touch with the general automotive industry through the vendors. If they had any new developments that would be pertinent to our new automobile—

[976] The Witness: The attachment at the quarter in the years gone by, we attached the fabric to the quarters by means of fasteners.

Originally we fastened with studs, as we call them, Durable Dot studs to be specific.

These studs had to be fastened and unfastened. Then we had as a development and an improvement a channel stud which was anchored to the belt.

This would permit this fastener to be released but you had to refasten it upon raising the top. This was found to be unsatisfactory and then the channel arrangement was designed with a cuff. The cuff arrangement was proved to be unsatisfactory because at times this cuff would stick in the channel and would not release.

The idea was, when the top was folded down, the top [977] would strip off from the cuff automatically but it would not replace itself automatically.

When you raised the top you would have to get out and insert the cuff under the channel. We found in some cases the cuff would strip off. There was a reinforcement on the bottom of the fabric, like an upturned piece of

fabric, that was inserted in the channels, that would in some cases strip off because of sticking in the channel.

These things are very annoying to the management. They have asked the Engineering to see what could be done for improvement.

In my section, as trim engineer, we had been thinking on the problem but really after trying various things never did come up with what we considered to be a completely automatic closure, a sealing arrangement at the same time.

Therefore, when the Mackie-Duluk arrangement was suggested and seen, immediately we recognized that here was a basic and fundamental construction that provided an automatic attachment of the fabric, that provided a seal in every station where we were needing this seal, and the management immediately recommended that this be used.

The Styling Department, as they were consulted on the matter, were delighted with this. This was because it took the fabric off of the outside belt of the car and provided a means for them to continue the belt molding around the automobile.

[978] Q. Is that the chrome strip? A. That is the chrome strip. That to them was a very improved matter, a very definite improvement in the style of the looks of the automobile.

Body engineering was delighted with this new arrangement because it was a very simple and inexpensive thing, from the drafting room standpoint. All that was necessary to do was to install this drain trough and to install a wiping arm and we were in business.

It was a very inexpensive change. The Trim Engineering Department were delighted with this arrangement because all we had to do in Trim Engineering was remove the cuff which we had trouble with anyhow and to extend the fabric on the quarter panel down to a point where it

could be attached on the drain and provide a reinforcement for that material which is a very simple change.

The Production Department also were delighted with this change because in the cutting and sewing room, the cutting room had very little to do except cut this material. It was less work than to cut the reinforcement.

The Sewing Section had less work to do, they did not have to make this complicated cuff and establish this cuff in a certain way on the bottom of the fabric, so the cutting and sewing were definitely improved.

The Shipping Department were pleased with this [979] because in the shipping of the tops from department to department and in the case of Mercury and Lincoln, where they had to be shipped to the plant, they could fold the tops into a small bundle. There was no heavy reinforcement at the belt. It was simply a soft piece of fabric.

The assembly line was delighted with this arrangement. It provided a means whereby this convertible top fabric could be applied on the car, the fabric could be attached to the rear belt, it could be attached to the windshield header and the number 4 rear bow and to the pillar and after it was all fastened the trimmer got inside the car. He merely held the fabric down and snapped it over the tabs, bent the tabs down and it was finished, and he installed the wiper arm. It was a very simple operation.

In fact the simplicity of the operation of this construction is its main feature and the proof of that is that it has been used on thousands of automobiles today.

* * *

A. The basic principle that was established is being used today.

Q. What are you referring to? A. The basic principle is that this fabric is attached to the [980] inside of the car body. It is attached to a point inside the car body below the belt to a point that creates a hinge so that when the

top is folded back the material never stretches and that is the only point you have to establish, where that hinge point is.

• • •

Q. Let us get back to the 1952-1954 Fords which is our main concern. Let us concern ourselves first of all with the rear quarter section. Now before this structure was put on the 1952-1954 Ford were there seals at the rear quarter of the convertible automobiles? A. Seals in the sense that they were attached to the outside of the car body.

Q. Sales in the sense that water could not get into the car? [981] A. Yes.

Q. Did these seals to a good job? A. Satisfactory, from a general standpoint. I would have to qualify that, Mr. Pollock. I qualify it in this way. You had a top, for instance, that had the fasteners on it. If the top fastener were the type that would strip off, that would make the top automatic, as it went down, the fastener stripped off from the sliding channel.

Now a rainstorm comes up and you have to raise your top. Assuming now you have the automatic features of raising the top, you can raise the top in the up position but if it is raining at the time, and many times the rain comes up quickly and comes in a downpour, you don't want to get out to fasten the top with the fastener. [982] Therefore, if you are driving along, this front edge could extend outward enough to scoop in water and therefore it would not be an automatic seal.

Q. I understand, Mr. Pickard, I am assuming you could do a good job. A. You could do a good job in that way.

Q. Did these '52-'54 Fords rear quarter structures do a better job from the point of view of sealing out water? A. Very, very definitely. This seal—

Q. Apart from the automatic features, did you keep more

water out? A. I would say we did, because there was nothing to do—you couldn't get water in. You didn't have to fasten anything, and you didn't have to depend upon the operator.

Q. That is to say, in both cases the same job was done.

The Court: In other words, it's already fastened.

The Witness: If it is already fastened, then it would be satisfactory in both cases.

Q. In other words, you are saying that snap fasteners didn't do a good job of keeping out the water. A. Or the cuff.

Q. Yes. You are saying these '52-'54 cars all did a good job? A. Yes, they did.

Q. Now, how important, to your knowledge, was it to fasten the flap to the trough for the purpose of sealing water out of the [983] car? A. Well, I would say it was important in this way. From a trim engineering standpoint, we would conceive of this arrangement that we have, if it was perfectly done, that you could have a good seal at the belt; but, as a practical trim engineer, we know that that perfect sealing at the belt is never done, or—I would say never done—I would say what we mean by never in that term, is that productionwise you couldn't find, if you put a hundred cars off the line, that you would have a hundred perfect cars. And in trim engineering terms, my experience has been that if Production has ten cars at the end of the line after producing one hundred, they are unhappy, and they come to us and want something done about those ten cars so they don't have to have those repaired. Therefore, we find that this is a very important feature.

Q. When you said, if you don't do a perfect job—what? A. If you don't do a perfect job of sealing at the belt, you still have the drain trough, and that is the reason the drain trough was put in there.

The Court: Would you feel if there wasn't any drain trough the seal wouldn't amount to so much?

The Witness: Well, I would say that is assumption, your Honor, because in trim engineering work—

The Court: Well, if you got ten cars and let the water through, you say that isn't going to please some of the [984] production?

The Witness: That's right. But, you see, we do have the drain trough.

The Court: My question is—I realize you are not a lawyer and you can't be expected to think as we lawyers do—but I am asking you to make the assumption that in order to save money you left the drain trough out. Would you be satisfied?

The Witness: Would I be satisfied?

The Court: Yes, with this device, if there wasn't any drain trough. Management came around and said, "We can save a dollar and a half by leaving out the drain trough—let's do it." Would you say, "Okay"?

The Witness: No, I wouldn't. I would recommend we leave the drain trough in.

The Court: Would you be quite forceful in your recommendation?

The Witness: Yes, I would.

The Court: All right.

Q. If management came to you and said, "We can save 10 cents by leaving off this flap attached to the rain trough", would you have any reaction to that? A. Yes, I would.

[985] Q. What would your reaction be in that regard? A. My reaction is, that we have a construction here that warrants the small expenditure that we are paying for; in other words, you're getting a construction that's completely

automatic, and you're paying very little for what you're getting.

* * *

Q. Have you ever seen a car with a fabric top with a cushion on it that had a gap? A. Yes, I have.

Q. How often would you say something like this could occur? A. Well, it could occur on every job; but we find that the [986] ordinary trimmer who has any interest whatsoever in his job would see that this did not occur; and we do have, however, people who do not have an interest in their job, and especially that is true on assembly lines where men are expected to do just simple, little sections of an operation. Therefore I would say that it could occur from time to time; therefore provision has been made in this particular case to take care of any eventuality.

Q. Including production errors? A. That's right.

Q. You discussed the question of access to the car, physical access to the car, during your early examination. A. That is right.

Q. Would you use this as merely a sales feature? A. No, I think that that is more than a sales feature. I feel that, if I was an owner of a car and any feature whatsoever was put on the automobile to deter a thief from getting into the car, I think it would be a good feature.

* * *

Q. From the point of view of sealing water out of the car, is it important that the fabric at the belt line come into contact with the belt line? A. It is desirable.

[987] Q. Is it important, though? A. It is not essential.

* * *

[989] Q. Now have you ever water-tested a '52 or '53 Ford in this manner? A. Yes, we have.

Q. To your knowledge have you ever water-tested such a car that had a gap at the belt line? A. Not an appreciable gap, no, in the Engineering Department.

The Court: I sustain Mr. Wolf's objection.

* * *

Q. Mr. Pickard, I invite your attention to Bessonneau patent #2185581. Have you ever read that patent?

Mr. Wolf: Your Honor, I object to his testimony with respect to patents.

The Court: Let us see what he has done about them.

Q. Have you ever read this patent? A. Yes, I have.

Q. Did you understand this structure from an engineering point of view? A. Yes, from the engineering standpoint I understand it very well.

Q. Have you ever seen a structure like that on a commercial automobile? [990] A. No, I have not. I don't think there would be one.

Q. From your understanding of the structure, can you tell me any problems that might arise from the commercial production point of view? A. In the rear quarter section I can anticipate many of them.

* * *

[991] Mr. Wolf: Your Honor, I also have another objection which has been quite apparent. It is my understanding of a trim engineer—at least this is what I have been told—is, they don't necessarily design linkages in this type of arrangement, they are practical engineers.

The Court: You may step right in now and ask him what he knows of linkages.

Mr. Pollock: Would you like to ask him about his qualifications, please?

Mr. Wolf: All right.

Cross Examination by Mr. Wolf

XQ. Have you ever had any experience in the design of linkages? A. Yes, sir. I have worked with a body engineer and draftsman for 35 years in the drafting room.

XQ. With what company? A. I worked with the Hupp

Motor Company, I worked with General Motors and Fisher. I worked with the Packard Motor Company, and I have worked with Ford. And in every case we have had, I have [992] had to personally go into the drafting room and lay over the board with the men who are developing convertible tops, and not only convertible tops but every other kind of automobile that is built today or that has been built.

XQ. Have you designed linkages? A. No, I did not design linkages personally.

XQ. Do you understand the nomenclature of linkages? A. Yes, I do, very well.

XQ. Did you understand the testimony with respect to linkages that Mr. Brosens gave? A. I certainly did. I think I understand more than a man who studied it for six months. I've been working in the drafting room for 35 years.

[997] *Limited Examination on Qualifications by Mr. Pollock*

Q. How long have you worked with the drafting rooms? A. 35 years.

Q. During this time did they do any linkage work? A. Yes they did

Q. Did you understand what they were doing? A. Yes, I do. I have understood it.

Q. Have you ever watched these men actually doing linkage work on the boards? A. Yes, I have to lay over the boards and work with them on it.

[999] This simplicity of linkage is for someone who does not know what linkage consists of in a convertible top and what elements are involved. It is a complicated piece

of mechanism. We put the very best engineers we have in the body engineering department on convertible tops.

* * *

[1001] All of these considerations, your Honor, are a tremendous problem which cannot be designed or cannot be done sitting here in this chair by me or any other person. They are considerations that are just not evident.

Q. I will get into the difficulties of the problem. We are examining your qualifications right now. Did you understand what these people were doing when they were working on the models? A. Yes, I did.

Q. Did you understand the problems they encountered? A. Yes.

[1002] Q. Did you understand the solutions they proposed? A. Many times I had to propose the solutions.

Q. You have actually proposed solutions involving linkage? A. Yes.

Q. Do you feel you are qualified to make any suggestions? A. Yes.

Q. Did your people accept your suggestions? A. Yes.

Q. Were they found to work? A. Yes.

* * *

[1003] *Examination on Qualifications by Mr. Wolf*

* * *

[1004] Q. Would you think you could go in and design these original linkages? A. Yes, I could.

Q. Could you actually go in from scratch, as far as you are concerned, and design completely these things? A. Yes, I could.

* * *

[1005] Mr. Pollock: Would the Court rule on this man's qualifications?

* * *

[1006] The Court: I will take it.

Direct examination by Mr. Pollock, Resumed

Q. Reading the Bessc ieau patent, I invite your attention to the hoop 2 of the Bessonneau patent 2,185,581.
A. Yes, sir.

[1007] Q. Have you had any practical experience with attempts to machine a part or manufacture a part of this general type? A. Well, I have had practical experience in trying to develop a part that would wrap around the body in a way similar to what this might be.

* * *

[1008] We found that with three-piece construction we could not even then match the bows and they use five pieces, using a corner piece, a side piece, and rear piece.

The Court: Go ahead.

The Witness: That is not the only defect with this particular arrangement here, to me.

Q. Speaking of Bessonneau? A. The Bessonneau. To me this is entirely not a production type of thing at all. If you brought this to me as a trim engineer and submitted it I would say it was, it just did not even have the principles that I would want in a production automobile.

* * *

[1010] The Court: Just as soon as you get to combinations, I will admit the scope of the testimony that this going to get into, and the scope of the cross-examination, rather terrifies me.

But leaving that practicality aside, just as soon as you get into talking about what the combination teaches and this witness sits up there and says it is very simple, we draw the line that way and poke the linkage that way and presto, you have something, I think the plaintiff has a perfect right to meet that in a number of ways. It seems to me this is one of them.

* * *

[1011] The Witness: I would like to call attention to

this hoop, as I see it. It is indeed very impractical because of the fact that it could not be trimmed or covered with the top fabric, without a number of things.

* * *

[1013] A. Well, that has to do with this hook. We have a linkage here that we would consider, that I would consider in engineering is absolutely useless. You see that long linkage? Now, if you anchor something on her, it means you've got a very loose control.

* * * *

Q. Yes. Mr. Pickard, from your experience in linkage work, have you considered that the Bessonneau linkage is simple? A. No, I would say it is very complicated. Not only that—I would say this particular linkage as it is shown here is impractical and impossible to use in the present-day automobile.

* * *

[1014] Q. I believe you characterize this as a complex linkage? A. Yes, I did.

Q. Were you present yesterday when Mr. Brosens was commenting on that linkage? A. Yes, I was.

Q. Did you hear him testify it was a simple problem? A. Yes, I did. I feel he only testified that because of his lack of knowledge of what constituted a job. I will point out a few things concerning this linkage that I am sure it's very evident.

* * *

Q. Is there anything different about the body of this automobile [1015] from the present day automobile? A. Yes, there is. This is not a presentday construction at all. And another thing, these bows, if you look at the way they are folded in Fig. 4, you'll see that this is not a practical construction. You have your header bar coming right down on top of your pillar, which would chafe the fabric, and it wouldn't in my opinion bind at all. Also, bow number 4

is right underneath another bow and it couldn't be a practical job. As I see this, it's not a practical job in any way, shape or form, and it's an only one-car deal.

Q. Mr. Pickard, do you know of your own information what calibre of man technically the automotive field applies to linkages? A. They apply their best men on convertible top linkage.

Q. Is it considered a difficult problem? A. Very difficult. It is most difficult for the reason that there are so many problems in effect. It is not a simple linkage problem, such as you have in a mechanical linkage. A mechanical linkage is something in a straight line that does a certain thing, and that is very simple and easy to figure out because you only have this straight linkage to be involved in. But on a convertible top you have a side-twisting of this top as it comes down. You have the fact of this cover which has an effect on it. This cover is attached across the job, and that is something that most people forget. And the effect of that [1016] material. You can see between the front section that the top is rippled, the next section is straight, the next section is rippled, and so on. And that may be true in any given case, but it is not true in every case. Therefore, you have to know what the construction is and what the elements involved are. And to sit here and to make any decision as to what would take place if you did something, I think it is pure presumption and shows a lack of knowledge of the elements involved.

[1017] Q. Mr. Pickard, I hand you Bessonneau patent #2157783. Have you read that patent? A. Yes, I have.

Q. Did you understand it from the engineering standpoint? A. From an engineering point, I do understand it.

Q. Now, Mr. Pickard, have you ever seen a structure such as this on a commercial automobile? A. No, I have not.

Q. Or a production automobile? A. No, I have not.

Q. Now, Mr. Pickard, if you see any difficulties in this I wish you would comment on them. However, if they are merely repeats of some difficulties you have spoken about before, will you so indicate and then address yourself to any new difficulties? A. Well, I would say that principally it hasn't the difficulties I pointed out before in that the hook bow number 60 is very difficult. It also has no means whatsoever of attaching or holding it in proper location at the rear edge. It had the same difficulties with the folding of these bows—

[1018] A. I would say that this construction here, as I pointed out, is principally the same fundamental things that are wrong with this top as with the other, in that the—

The Court: Well, if they've the same, let's not repeat them.

The Witness: All right.

Q. Do you have anything else to say about this Bessonneau patent? A. No.

Q. I hand you Ackermans Patent 2,549,153. Have you read this patent? A. Yes, I have.

Q. Did you understand it? A. Yes, I believe I do.

Q. Have you ever seen a structure such as Ackermans' disclosure on a commercial automobile or a production automobile? A. No, I have not.

Q. I invite your attention to Figs. 9 and 10 of this particular structure, and I ask you to comment on whether you see any difficulties with the structure from a practical point of view? A. Yes, I do.

Q. Would you please tell us what they are? [1019] A. The difficulties in this construction here is, that first of all it has no positive means of sealing at the belt—in this respect. Unless you assume that you have a belt rail, indicated here as number 132, and that this belt rail is entirely straight, and that the tension on the fabric from

front to back is such that it would hold the material adjacent to the body; and then you have got to have some more assumptions—

[1020] The Witness: Now, if we did do that, then you must assume that this material, when the top is raised, is always going to lay out against the body panel No. 128. This assumption is something that is not practical at all from a trimmer's standpoint because, when you fold this top down as indicated in these constructions here, the material in that area necessarily ripples or folds in two folds. Now—all right.

Then, if it does, when the material returns to the upward position, that material can also be curled, it could be curled in, it could be curled out. There's no telling what takes place in this top material when it is folded down. Therefore, you are not assured of a seal at all times with this type of arrangement.

The Court: Ackermans suggested there was going to be [1021] some tension there and that would tend to draw out those puckers.

The Witness: Well, you can build tension in a fabric—assume that you can build this tension, you can tell the workmen you've got to have this tension, but what assurance have you got that the workmen will put that tension in it?

The Court: That is really going to be a question of the shape and design of the fabric, is it not?

The Witness: Well,—

Mr. Pollock: The point is the tension to the low.

The Witness: No, the point I'm making, your Honor, is; you are depending upon tension front to back, you're depending upon an element—a human element.

The Court: Very well.

The Witness: And if the workman does not put the proper tension on, well, then you're in trouble.

Another thing you're depending upon, your Honor, is, this seal or this arrangement here is sewed or stitched to this lower flap. If you will see some of the sewing that's on the ripples that you have here, or other sewings that we have in automotive use, you will notice that the sewing is not all perfect. Therefore, you would be depending here upon a flap which is only extended down without any effort whatsoever to draw the wrinkles out to keep this seal properly placed against the body panel.

We have also found in an arraingement like this it is [1022] not secure against water leaks. We have done considerable work, your Honor, and I have been out many times around the test track. We often do that. We have a test track at Ford right behind our building; and then we have them out in other locations. And we have to go out to ride-test these cars, as well as to engineer them; and I must go out, your Honor, with test drivers, who may not be satisfied with Pickard's decision, they must be satisfied as test drivers to criticize my work. And therefore when we would go out— and we would have an opening in a top such as this—what we do—

Q. Where is the opening? A. This opening is between the panel and the flap because it is not attached securely.

Q. Well, how are you going to get an opening there? A. I mean, we don't have it permanently attached.

Q. To the trough? A. To the body, in any way.

* * *

[1023] Q. You are speaking of the flap? A. The Ackermans flap. Under certain conditions where you have a soft cloth and you would have a rain, this could very well blow this flap in beyond the drain trough and to deposit the water into the damageable parts of the automobile.

Now, we have had that definite experience; so that we

know we must have more than just a hope-so seal, as we have here, under ideal conditions. And that's what we have developed, and we have now an automatic seal that does work.

Q. What makes that automatic seal? A. This is not an automatic seal. This is only a hope-so seal.

Q. What's the difference in Mackie-Duluk? A. In Mackie-Duluk the fabric is attached directly to the drain trough and, as attached securely to the drain trough, providing a definite means of catching the water that goes in between. It [1024] also restricts the wind from blowing the fabric in beyond a limited point; and it is a definite, positive seal. We never had trouble with the water in this arrangement.

Q. Now let me ask you a question. Is there any shrinkage problem in the rear quarter of Ackermans? A. Yes, there is. There would be a shrinkage problem here. We find the fabric unattached that will shrink more than if it is attached; therefore, you would likely have a shrinkage problem in here to such an extent that the seal number 128 could very well be above the belt line and therefore would take the sealing member right out, make it ineffective, especially at the center of this opening.

Q. What would happen to the bottom of the flap 130? A. The bottom of the flap 130 could very well curve in or out. There is nothing here, unless you have a metal stiffener in there, that would insure that it would be straight down and would bear against the panel or drain trough 128.

Q. I'm speaking of the shrinkage of the flap. What could happen to that? A. The flap would raise the bottom end up and make it more vulnerable for the water to go over the top of the drain trough.

Q. You mean, the gap would be greater? A. The gap would be greater.

Q. Now, Mr. Pickard, are you able to comment whether or not a wiper arm could be simply added to the structure to make it [1025] operate in the way of Mackie-Duluk? A. Yes, I am able to comment; and I would say, that a wiper arm on this construction would not be practical because of the fact that the wiper arm should come below the drain trough, and, if that was the case, you would have to put an offset in the wiper arm, which would be a complicated mechanism; and, also, the wiper arm might catch the bottom of this extending flap, and if it did then you would be defeating your purpose. The wiper arm just doesn't fit into the situation.

* * * *

[1029] The Court: Well, so far as their being adjusted is concerned, Mr. Shapiro testified he was thoroughly familiar with the field and nobody ever adjusted them.

Mr. Pollock: I believe this witness is going to contradict that testimony; that he has actually observed '52 or '53 Fords where there is no appreciable gap at the belt line, so some adjustment must have occurred.

The Court: Well, at least for the purpose of rebutting what Mr. Shapiro said, why isn't it admissible, Mr. Wolf?

* * * *

[1031] Q. Mr. Pickard, you have testified that you saw some '52 or '53 cars with no cushion which did have an opening at the belt line? A. That is right.

Q. Did you also say that you had seen some that did not have a gap at the belt line? A. Yes, that's right. Did not have a gap at the belt line.

* * * *

[1032] Q. Mr. Pickard, let's go onto another subject, please. Did you in your observations observe any cars with a wiper arm which had a shingle on the replacement top fabric? A. Yes, I did.

Q. How many such cars would you estimate you saw?

A. I would estimate, with the shingle and the wiper arm, likely in the nature of 25 or 30 cars.

Q. Where were the shingles with relation to the belt line on the cars that you observed? A. The shingle was adjacent to the belt line, backing up the [1033] fabric.

Q. Was there a gap between the shingle and the belt line? A. Yes; in most cases there was a gap between the belt and the fabric.

Q. Were there any cases where the shingle was sitting right out at the belt line? A. Yes, there was.

Q. Now, when you speak of a slight gap, do you have any idea what that would be in dimension? A. Yes, I measured a number of those, and we found that the gap would range from the fabric up tight to the belt rail—

Q. I'm speaking of the shingle now. A. Yes, with the shingle on. And we found some as much as— We found one car which was ¾ of an inch away or more.

Q. What was the smallest gap? A. Essentially up to the belt.

* * * *

[1036] Q. When you were at the Western Auto Store, did you have occasion to buy any other product? A. Yes, I bought a patch kit.

Q. I hand you a kit with a sales slip on it. Will you please identify it? A. This is a kit entitled "Iron-on Convertible Patches." It is produced by the Western Auto Associates Store. It was purchased at 561 High Street, Dedham. It was purchased on August 18, 1958.

Q. Do you know how long products such as this have been on the market? A. Yes. This sort of thing has been on the market for a good many years—ever since we have had tops, in fact.

Q. This is a heat sealing attach, is it? Is that a form that has been long on the market? A. No, it hasn't always been heat sealing except since heat sealing patches have

been invoked. That is still a number of years back. But another method of accomplishing the same thing [1037] is using a piece of regular top material and cementing it on as you would putting a patch on a tire. You cement both sides. You cement the patch and you cement the top and then you put them together.

Mr. Pollock: I would like to offer this in evidence.

* * *

The Court: I will take it.

[Two Iron-on Convertible Patches marked Plaintiff's Exhibit 26-A and 26-B.]

* * *

[1038] Q. Mr. Pickard, I hand you another item, and I ask you whether or not you can identify this? A. Yes, this is a 1958 catalog of Pep Boys Auto Accessories.

Q. I ask you to turn to page 22, I believe it is. A. Yes.

Q. Are there any products advertised on that page which are pertinent to our present discussion? A. Yes. They advertised a top coat, a convertible top repair outfit, and a convertible top dressing.

Q. What is this repair outfit to which you refer? A. Well, their advertising set "makes this a fast, easy, waterproof, permanent repair job, that it contains 72 square inches of top fabric patch, bottle of cement, and an easy-to-use applicator. Also great for attaching tarpaulins, boat covers, canvass, etc. Do it yourself and save. Price 98 cents. Have tan and black."

* * *

[1040] Q. Have you had occasion to call Aro Top Sales Company, one of the defendants here, with regard to patching? A. Yes, I have.

* * * *

[1041] Q. What did they tell you? A. They assured me—

* * *

Q. Would you go ahead, Mr. Pickard. What did this

person tell you? A. I asked the question, if I had a 1953 Ford and had a small hole in my convertible top fabric, if they could sell me a patch kit that I could put on; and they said no, they didn't have them, but they could install a patch on the top quickly if I would bring the car over—it was a very small job, and they would fit the material to the hole and cement the patch in place.

* * *

[1044] Q. Mr. Pickard, have you had any experience with the patching of [1045] tops? A. Yes, I have.

Q. Can you tell me when this is done and whether it is a usual procedure? A. Well, usually the patching of a top is only done when you have a small hole—like, for instance, we have had severe hail storms in that area, in which some of those large hail stones would go directly through the top and create a small hole which might be a quarter of an inch in diameter, or 3/8 of an inch in diameter, different size holes; and in that case, if you have a good top, you can have a patch installed on that top, and it has been done and is being done regularly.

Q. Do you know over what period of time it has been done? A. It has been done ever since we have had tops. And may I state further?

Q. If it is pertinent to this inquiry. A. At Ford Motor Company we also repaired tops of that nature. If some accident had happened to a convertible top that is on test if somebody, if a top is down, laid tools in there and put a hole in there, we patch it, or we may take off the top and install a new section of material in that area.

The Court: Does it look well?

The Witness: It don't look as good as a new top, your Honor.

The Court: It's rather conspicuous, is it not?

[1046] The Witness: Well, it depends on the new top, how discolored it was. Actually it wouldn't be too conspic-

uous if the top is relatively new and the patch matches the fabric.

The Court: Would you say that it was the fact that the ordinary customer who was going to buy a top car with a convertible top is interested in the appearance?

The Witness: Yes.

The Court: Relatively speaking, a new top doesn't cost too much in proportion to the outlay that he has made in the car, does it?

The Witness: That's right. And yet, some young men have convertible tops who do not have an excess of money to put on a new top every time they want it.

The Court: I think I would take judicial notice of the fact that there are some young men that would drive cars in a condition that are offensive to the eye, as you described it earlier.

The Witness: That's right.

The Court: I don't know that that solves the problem at all. Don't you think, or do you think that persons who have relatively new cars and not jalopies or what-have-you, are conscious of the top as being a conspicuous part of the car?

[1047] Yes, I would say that is true and yet, your Honor, if you had we will say a 1953 top and you have a replacement top on it and this top is relatively good yet, you could not expect that if you accidentally poked a hole in the top, you could not expect people who put the top on to replace that for you for nothing.

[1049] Q. What is your understanding of the function of the wiper arm on these cars? A. The wiper arm was originally designed to assist the fabric and to hold it over as close as possible to the belt rail and to assist in producing a good quality, a good looking job, especially from a styling standpoint or an engineering trim standpoint.

It also aids in keeping out thieves because it has a bar at that point. It is also is an assistant, in the belt, preventing snow and ice from getting in there, if you had snow [1050] coming down at an angle and striking—

* * *

Q. If there is a gap, is it doing its job, as you testified? A. It isn't doing it as good as it could do.

* * *

[1051] *Cross Examination by Mr. Wolf*

XQ. Mr. Pickard, when did you first see a fabric top which was automatically operated and having a wiper arm? A. I wouldn't be able to give you the exact date, but it was on the production of General Motors cars, 1950.

XQ. Presumably around 1950? A. Yes.

XQ. Did you see this independently, or did somebody call it to your attention? A. No, we are watching out for those sort of things all the time.

XQ. When you saw it did you recognize that as being a real solution at that time?

The Court: As what?

Mr. Wolf: As being a real solution to this problem that he was considering at that time? A. Yes, we did.

* * *

[1054] XQ. Now apparently one of the principal things you recognized, that I have been able to gather from your testimony, is that the fabric was attached down below the body line; is that correct? A. That is correct.

XQ. And the top worked automatically? A. That is right.

XQ. And then you also considered it of some importance the use of this wiper arm as part of the whole structure? A. That's right. A cooperating part. I considered the attachment of the fabric below the belt at the proper length to be the fundamental principle to our problem, the

automatic raising and lowering of the fabric. And that was the revolutionary idea.

* * *

[1055] XQ. Well, you said you worked for a long time on the problem of trying to effect a seal in proper fashion? A. That's right.

* * *

[1058] XQ. In substance, let us turn back the clock to around 1949.

The Court: Turn it back to a time before you saw Mackie-Duluk.

The Witness: Yes.

The Court: Shall we say immediately before you saw it and you have before you, your patent lawyers got to work and said maybe these will help, they showed you the three Bessonneaus and Ackermans.

Mr. Wolf: Yes, your Honor.

XQ. What particular ideas might you have developed from these references? A. Oh, I would say that these Bessonneaus definitely are no help.

XQ. I am not talking about no help in an abstract— A. No help in suggestions, it does not offer any suggestions.

XQ. It doesn't offer you any suggestions whatsoever? A. No, indeed.

XQ. How about the Ackermans patent? A. The Ackermans does not offer a suggestion, not an answer.

XQ. Does it give you any direction to the problem you are concerned with? A. It does not. We have had fabrics straddled on the belt [1059] rail before, it did not answer our problem.

XQ. My understanding of Ackermans is it does not straddle, it is inside. A. It is only a flap inside. We have had them inside and outside before, that does not answer the problem.

XQ. Ackermans was, as I understand it, an automatic operable top, it stretches the fabric into contact? A. That is right.

XQ. Wouldn't this have suggested to the Ford engineers a line of endeavor they might engage upon? A. No.

XQ. It would not suggest it to you? A. No, it would not; it not only would not, it did not.

XQ. You mean you did see it? A. We knew of it.

XQ. You knew of Ackermans? A. Yes, sir, but we did not consider it to be of value.

XQ. Let us specifically look at the Bessonneau structure. Don't you agree that Bessonneau—let me ask you this. In this Bessonneau we have on the board, the first Bessonneau patent examined, am I correct in understanding your testimony, you said this would not work? A. I said it would not be a production type of thing.

* * *

[1060] XQ. The objections you made to this Bessonneau and the other Bessonneau and Ackermans is one which is based upon the impracticality of the device from the point of view of production engineering? A. I would also say from the point of view of efficiency, I would say that is a very inefficient operation, it isn't an automatic arrangement as we would consider.

XQ. It is automatic to an extent, you have to get in and out. A. That is all, but there is no sealing to it, it does not automatically seal.

* * *

[1063] XQ. Did you look at Figure 2 of the patent? A. Yes, I did.

* * *

XQ. Apparently it does not contact the side of the car at least from this figure. [1064] A. I do not know, that figure is not a drafting figure, it only shows things in broad outline. You have got a demonstration of it here.

XQ. Do you disagree with the operation of that hoop when it is raised up that it would contact a line such as we show there? A. If you knew that was that way, you would have made your model that way. If shows to me you don't read the drawing, the model is not made anywhere near like this.

• • •

XQ. Now you stated you had felt there were a number of difficulties with the operation of this particular construction. [1065] A. Yes, sir.

XQ. Those difficulties, I presume, were difficulties of engineering, of production engineering, is that right? It would not be practical to put on a Ford motor assembly line? A. It isn't practical to put on a line.

• • •

[1069] XQ. Might not the Ackermans construction suggest to you that it would be feasible to bring a flap down inside, the inside of an automobile? A. No, I am sorry to say it did not. I wish it had. I would like to have been the fellow who thought of that first.

XQ. To you yourself it did not suggest that? A. No, it did not. I wish I had.

Mr. Pollock: Was the question, just inside of the fastening?

Mr. Wolf: Bring it down inside.

The Court: I assume he means, the witness understood him to mean to bring it down further.

The Witness: Like Mackie-Duluk.

• • •

[1071] XQ. Let us get back to this first Bessonneau point. Would you disagree with me in my contention that this bow 2 suggests a movable arm that operates from a well down below the body line to press the fabric towards the body line, regardless where it is attached? A. All I can

say is, if they had submitted that to me, I would not consider it of any value at all.

* * *

XQ. I am just saying, look at that portion of the patent which is referred to as the tilt hoop 2, in connection with that tilt hoop is it not true Bessonneau uses it here and suggests a device, provides a member adapted to move upwardly from the bottom of the car over the well of the car and press the fabric or urge the fabric toward the body line? A. I would say it does not.

* * *

[1074] XQ. All right. Now let me ask you a further question. Referring just to this element number 2 and the linkage around it or connected to it, I would presume that if I now direct your attention to it—there are a number of features to this construction. A. A number of what?

XQ. A number of features. A. Features, yes.

XQ. Features that might be used at some future time or some construction. Well, what features do you see about this? A. I don't see any.

XQ. As an engineer, don't you think you would be able to see— A. I don't see any.

XQ. You don't see any that you could possibly use? [1075] A. No, I don't.

XQ. There isn't any utility this thing might have? A. Yes, sir, I don't think there is anything that I would spend a nickel's worth of time on. I'm sure if there was—let me answer this—if there was, somebody would have discovered it before now. The fact that no one has used it—

XQ. That isn't an answer. A. Well, it is.

The Court: It's no more argumentative than your question. That's the trouble with argumentative questions.

* * *

XQ. Well, without referring to the '58 cars necessarily, will you agree that the fundamental concept that you saw

in the G.M.'s '50-'55 was the attachment of the fabric below the body line a [1076] sufficient distance to permit raising and lowering the top; is that right? A. Yes.

XQ. That's what you consider to be the real point? A. That was the real crux of the whole thing. That was the revolutionary idea.

XQ. And the attachment or the extension of the bow mechanism in the form of a wiper arm to create the seal was just an added element which was just extra. A. Well, I wouldn't put it as just extra. I would put it, at that time we considered that a wiper arm was in cooperation of the rest of the design.

XQ. So that at that time it was considered an absolute necessity or a very desirable necessity? A. A desirable feature.

XQ. And it wasn't until a long time afterwards you found out you could eliminate the wiper arm and get the same sort of results; is that right? A. Well, in the cars we're talking about we didn't eliminate the wiper arm.

XQ. Yes. But I mean, it wasn't until subsequent to these cars we're talking about you discovered you could eliminate the wiper arm by redesigning certain elements, I presume, to get the same sort of result? A. That's right.

[1077] XQ. You have indicated also that you have done considerable looking at General Motors cars. Have you in looking at General Motors cars concluded that they provide the original construction with respect to the same tolerances and closures that they do in the Ford Motor Company? A. I would say principally the tops we have seen provided the same general construction and appearance, for the most part, that are on the original tops—the general appearance.

XQ. As Ford? A. As Ford.

[1078] XQ. Have you seen the General Motors tops where they use a cushion? A. Yes.

XQ. Have you seen many of the original tops using cushions? A. Yes.

XQ. Did you notice the tight fit in the areas between the cushion and the body line? A. Yes, I did.

XQ. Is that usual in the General Motors construction? A. Yes, it is.

XQ. You criticized the Ackermans construction, I believe, and said that if you attempted to put a wiper arm in that construction it would have to be above the trough. Is that correct? A. No, I did not say that. I just said that the Ackermans construction would not lend itself to the wiper arm as well as if the material were lower down; that ordinarily to place the wiper [1079] arm in the inside of the body, it would have to be placed roughly when the top was folded down below the drain trough.

XQ. The wiper arm in Ackermans would have to be below the drain trough in its folded position? A. Yes.

XQ. You find that a defect? A. A defect?

XQ. Yes. A. In the Ackermans?

XQ. Yes. A. Well, only because the wiper arm would go below the bottom edge of the fabric; and, as the wiper arm comes up, the fabric may not be over against the wall of the car as the drawing shows; it might be standing inward or tilted inward, and the wiper arm would catch the bottom of the fabric.

XQ. But there is no problem in this point; apparently the mere fact it might bring the wiper arm down below the trough is of no consequence? A. Well, I would say it was of major consequence.

XQ. But aside from the length of the flap. A. Well, I would just say it can be released at the same time. If it is a short flap they have no wiper arm.

[1081] XQ. Examining the second Bessonneau patent, do you recall the arm 60? A. Yes, I do.

• • •

[1082] XQ. Would that patent have given you any food for thought if you saw it some years ago? A. No, it would not.

XQ. You mean, it wouldn't even have suggested lines of work that you might embark upon? A. No, I see nothing whatsoever that would indicate any help at all from a production standpoint.

XQ. I'm not talking about the production standpoint. A. Well, we have talked about production.

XQ. I'm talking about a suggested line research. A. No, when we work on research we have to be practical or we wouldn't get paid. When you have a bow like that underneath and would have to take the whole assembly off, set the fabric to the bow and then reassemble the body—right away it would be thrown out.

[1083] XQ. Have you seen any references at all which would suggest lines of research that you might embark on which would conceivably solve this problem? A. No, I haven't. I've never seen a thing that would help us.

• • •

XQ. You mentioned you saw a number of cars with shingles. Is that right? A. That is right.

XQ. And you mention distances that you observed them? A. Yes.

[1084] XQ. I presume those distances were distances above the body line of the car? A. That's right.

XQ. Okay. You also talked about patching. You would agree with me that those patches are not at all usable in all instances; is that correct? A. No, I would not agree with you. They are useful and can be used in all instances that I know.

• • •

[1085] XQ. Tell me something about how good these patches are. Don't you usually find where you have to put a patch on a car that starts to get these wear holes in it, that you end up where you have so many patches on that the top might look like quilt work? A. Well, actually a patch—I've never seen a patch put on what you might call a wear spot.

[1086] A patch is usually put on a hole. A hole is usually caused from either, like I said, hailstorm coming through or somebody throwing a rock through it, somebody cutting it with a knife.

When your top is folded down, you fold your top in a well, in a compartment. If you look in there you will find shoes in there, roller skates, all these kinds of things.

You might fold the top down on some sharp instrument, it would cut the fabric. You would patch that.

XQ. The use of patches apparently or primarily is for conditions where the top is in otherwise relatively good condition except for a very local area? A. That is right.

XQ. Have you ever had occasion to learn of an individual bringing a car in and having a section of the fabric top removed and replaced, cut to order? A. Yes, sir, we have done that.

XQ. You have done that on new tops? A. Yes, sir.

XQ. Is that very conventional, when a car has had a top on it for a year or so or a year and a half, and one part of it starts to wear a lot more than the other? A. I would say again, where we have done this specifically might be a case of a quarter. By a quarter we mean one of the pieces of material sewn over the outside or center section [1087] of the car.

XQ. Talking about new cars? A. It could be a new car. It could be an older car, which has damaged that quarter. It might be damaged all the way along. Then you would take that top all off, sew on a new quarter and put it back.

XQ. Supposing the top has been on for a year and a half, two years or more, would you normally do that? A. No, you would not, normally.

XQ. What would you normally do? A. You would normally replace the whole top.

XQ. You said before, Mr. Pickard, to your knowledge the Ackermans patent was never put into production, is that correct? A. That is correct.

* * *

[1088] *Redirect Examination by Mr. Pollock*

Q. You were asked about tolerances at the Ford Motor Company. Inviting your attention to the rear quarter section, when a car is going down the assembly line do you always have a good fit at the rear quarter, speaking of convertible automobiles, say 1952-1954 models, the belt line region, do you have a good fit at the belt line? A. I would say generally we do. There are exceptions as we have in all other jobs.

Q. If you have a sloppy job at the belt line does that affect the operation of the top? A. I would say one of the strong features of this construction [1089] is that it does not demand that the top material be perfectly assembled or any other thing.

This construction lends itself well to production use because of the fact it is automatic and in spite of the fact you have poor workmanship it still is essentially a good job.

* * *

VOLUME II

TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, ~~1959~~ 1960

No. ~~582~~ 21

ARO MANUFACTURING CO., Inc. ET AL.,
PETITIONERS,

vs.

CONVERTIBLE TOP REPLACEMENT CO., INC.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS
FOR THE FIRST CIRCUIT

PETITION FOR CERTIORARI FILED DECEMBER 11, 1959
CERTIORARI GRANTED FEBRUARY 29, 1960

VOL: 3 g. Record
IN BACK OF BRIEFS

SUPREME COURT OF THE UNITED STATES

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[fol. 623] [File endorsement omitted]

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

Civil Action No. 56-357A

CONVERTIBLE TOP REPLACEMENT CO. INC., Plaintiff,

v.

ARO MANUFACTURING CO. INC., MAE SHAPIRO, GEORGE SHAPIRO, MARSHALL SHAPIRO, HAROLD R. SHAPIRO, JOHN RAYMOND HAMLIN, Defendants.

PLAINTIFF'S INTERROGATORIES UNDER RULE 33 F.R.C.P.—Filed August 9, 1956

Now comes Plaintiff, and, under the provisions of Rule 33, Federal Rules of Civil Procedure, propounds the following further interrogatories to Defendants and to each of them.

. . . . . .

8. (b) Have any changes in shape and/or construction [fol. 624] been made in Aro Regal convertible top Part No. 134, since January 1, 1954. If so, describe all changes in shape and/or construction that were so made.

8. (c) Have any changes in shape and/or construction been made in ARO Deluxe convertible top Part No. 134, since January 1, 1954. If so, describe all changes in shape and/or construction that were so made.

. . . . . .

Respectfully submitted,

Walter Jay Skinner, Paul V. Power, Attorneys for Plaintiff, 82 Devonshire Street, Boston 9, Massachusetts.

[fol. 625] Certificate of Service (omitted in printing).

[fol. 626] [File endorsement omitted]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

Civil Action No. 56-357A

[Title omitted]

ANSWER TO PLAINTIFF'S INTERROGATORIES—
Filed August 17, 1956

Now comes the Defendants, Aro Manufacturing Co. Inc., Mae Shapiro, George Shapiro, Harold R. Shapiro and John Raymond Hamlin, Defendants, in the above-entitled Action, and answer the Interrogatories of the Plaintiff under oath as follows:

* * * * * * *

8. (b) Yes. Very early in 1954, the cushion incorporated into the fabric was eliminated and a flap secured to the fabric and adapted to overlap the bodyline of the automobile was utilized. Subsequently the flap or fold was also eliminated completely. Other changes included the restyling of the top by changing the position of the seam; previously the seam was positioned at an angle of 45° at the rear valence, subsequently it was positioned in a vertical line.

*

8. (c) Same as 8 (b).

* * * * * * *

Aro Manufacturing Co. Inc., By Mae Shapiro, Treas.,
George Shapiro, Harold R. Shapiro.

* * * * * * *

[fol. 627] Notice of Service (omitted in printing).

[fol. 628]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

Civil Action No. 56-357-A

[Title omitted]

DEPOSITION OF J. R. HAMLIN—August 28, 1956

* * * * * * *

Present:

Elliott I. Pollock, Esq., 803 Ring Building, Washington, D.C., and Walter Jay Skinner, Esq., 82 Devonshire Street, Boston, Mass., of Counsel, for the Plaintiff.

David Wolf, Esq., 68 Devonshire Street, Boston, Mass., for the Defendants.

* * * * * * *

[fol. 629] By Mr. Pollock:

Q. I again note in this particular schedule on Plaintiff Exhibit S you have a heading "Package Assembly," and this particular heading states that every Aro top, and presumably that includes top No. 134, includes simple easy instructions, and that these instructions are enclosed in the package.

At the time that this literature, namely, Plaintiff Exhibit S, was being distributed, is it your recollection that such instructions were being enclosed with the tops?

A. Yes, I think so.

* * * * * * *

[fol. 630] By Mr. Pollock:

Q. I would like to clear up one other point and that is, it is my understanding that the replacement tops you manufactured for Ford to replace the original tops, were not in all respects similar to the Ford tops as originally made. Is that a correct statement?

A. Again, I am not qualified to answer yes or no.

* * * * * * *

[fol. 631]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

Civil action No. 56-357A

[Title omitted]

DEPOSITION OF GEORGE SHAPIRO—August 28, 1956

* * * * * * *

[fol. 632] Cross examination.

By Mr. Wolf:

Q. Are you aware of a difference between the parts as made, replacement parts made by your company, replacement tops made by your company, and the original tops as made by the original manufacturer?

A. Yes, I am.

Q. Could you briefly describe what that difference is?

A. Well, as of now, as of this date?

Q. Would you describe it chronologically?

A. The first difference was in the back curtain where we changed the whole rear curtain assembly, different type of equipment in 1952, 1953 and 1954.

* * * * * * *

Q. Do you recall specifically any construction differences relative to the area around the rear quarter at the body line?

A. At the body line?

Q. Yes.

A. There was.

Q. Would you please describe those changes?

[fol. 633] A. When the Ford first came out in 1952, the rear quarter was assembled in an entirely different way. It had an over-size curtain, and what we did, we redesigned the back end of the top to tack on. Theirs was not tacked

* * * * * * *

[fol. 634] [File endorsement omitted]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

Civil action No. 56-3574

[Title omitted]

DEFENDANTS' INTERROGATORIES UNDER RULE 33 F.R.C.P.—
Filed September 15, 1956

Now comes defendants and under the provisions of Rule 33 of the Federal Rules of Civil Procedure propound the following interrogatories to the plaintiff to be answered under oath.

1. a) How many stockholders does the plaintiff have?

1. b) Identify by name and address all the stockholders of the plaintiff corporation if there are less than fifty, and if there are more than fifty, identify those holding more than 2% of the stock.

2.) Identify by name, office and address the officers and directors of the plaintiff.

3. a) When was the plaintiff organized?

. . . . . .

4.) What is the business address of the plaintiff?

. . . . . .

6.) Does the plaintiff manufacture or sell any products?

. . . . . .

8.) Does the plaintiff own any interest in patents other than the one subject to the present action?

. . . . . .

[fol. 635] 10.) Does the plaintiff have a license under or in any other way benefit from a patent or patents other than the one subject to the present action?

. . . . . .

12. a) Does or has the plaintiff derive or derived an income from the patent subject to the present suit?

12. b) Does the plaintiff derive an income from any source other (if any) than the patent subject to the present action?

. . . . . .

[fol. 636] Aro Manufacturing Co. Inc., Mae Shapiro, George Shapiro, Harold R. Shapiro, John Raymond Hamlin, By Ezekiel Wolf, their attorney.

Certificate of service (omitted in printing).

[fol. 637]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

[Title omitted]

DEPOSITION OF HAROLD ROBERT SHAPIRO—October 4, 1956

. . . . . .

[fol. 638] By Mr. Pollock:

Q. You will recall that I was particularly concerned about a change in your top construction for the part No. 134 which occurred early in 1954. At that time, to refresh your recollection, the sealing strip or cushion which had previously been incorporated in your top was removed on advice of counsel?

[fol. 639] A. That is right.

Q. And I inquired at that time whether any complaints had been received from your customers to the effect that the function of the top had been impaired, or that the top did not work as well. Mr. Hamlin testified that any such complaints would come to him and he had never seen any. Do you recall that there were never any complaints, to your knowledge?

A. To my knowledge, I don't know of any.

Q. I believe your brother, George Shapiro, testified in the same way, and he stated that he felt the top still oper-

ated quite satisfactorily, and I will get into that subject later on, but would you agree with this statement?

A. Yes.

• • • • • • •

[fol. 640] Q. As I understand you, Mr. Shapiro, you are saying when a man in a trim shop has a customer, and that customer requests that he take off an old top on the [fol. 641] car and install a newer replacement top from the stock of a trim shop for that particular car and model, then you would say the body shop man would go to this trim jobber and buy a top, say an Aro top, with the proper model and part number, and would install that top on the old car?

Mr. Wolf: I object to the question on the ground, first, you state that the automobile owner, you did not state whether or not the top of the automobile in question was an original or replacement top, or top of original design. It is my understanding there is a difference between original design and replacement top in many instances, and a difference in method of replacement.

• • • • • • •

Q. And if a man, say, were to replace one of your tops on a 1952, 1953 or 1954 Ford, and that Ford had the original equipment on the car, he would take off this old top, and having seen how the old top is installed, would try to install the new top in the same way?

A. I don't think so. We don't install and we don't make our tops, as far as installations, like the original factory.

[fol. 642] Q. Would you explain that, please?

A. Yes. The original factory top on the 1952, 1953 and 1954 Ford and Mercury, namely, 1952 had such a tremendous curtain in the rear that I don't think there are three trimmers in the United States who would even attempt to put one on, because this top was installed when the car was completely dismantled.

Q. When you say curtain, if I may interrupt you, do you mean rear window?

A. That is right. Getting into the rear of the side quarter at the bottom. There is no trimmer in the country who would spend the time to reinstall a new top like in the

factory. I can't go into detail because there are too many bolts and nuts to talk about.

• • • • • • •

[fol. 643] Q. I believe we can get into this question of installation later on, but to revert for the moment to something you did say, you said that no trim man would take the time or the trouble to install one of your tops in the same way that it had been installed in the factory?

A. Another correction. He could not install it like the factory because we don't make it the same way.

• • • • • • •

[fol. 644] Q. As I gather from your testimony, Mr. Shapiro, there were some tops manufactured for both Chrysler and General Motors cars, and of course tops were manufactured for Ford cars, which had a cushion in them as originally manufactured?

A. Yes.

Q. Do you manufacture any tops now that still have such a cushion?

A. No.

Q. Were the cushions dropped from all these tops at substantially the same time?

A. All of them.

Q. Just pursuing this a bit further, as I recall, when the cushion was dropped from your part No. 134, you substituted a flap which we are calling a shingle in that part 134?

A. Yes.

Q. That was a temporary substitution which has since been dropped?

A. Correct.

Q. Was that shingle tried on other ones of your various models, or part numbers, I should say?

A. Yes. It was tried on 509, Lincoln, 1952 to 1955 Lincoln.

Q. Is that the only car it was tried on?

A. No. It was tried on General Motors, 1950 to 1954.

Q. As I understand it, the flap is not being used on any of the tops now?

A. We are using the shingle on 1950 to 1953 General Motors, all models, and 1954 Pontiac and Chevrolet.

• • • • • • •

[fol. 645] Q. It is the original pattern for the 1952 cars, [fol. 646] the 1952, 1953 and 1954 Fords in each case?

A. But the original pattern we made for the 1952 car is not the same pattern we are using today.

Q. I am interested in that. Would you say when you changed?

A. Yes. We made a top for the 1952 car, which was completely redesigned in 1953; that is, the seam structure. Actually, the size has to be the same because it is going on the same frame, but the seam structure and the structure of the rear valance and rear curtain have been changed, and we did away with the cushion and came out with the shingle, and then we did away with the shingle. In other words, we probably had five patterns made of that particular model car, 134.

• • • • • • •

[fol. 647] Q. When you say you had trouble, did you receive complaints about the shingle?

A. We sell enough tops locally, and I can personally spot one of our tops two streets away, practically, and I can, riding around, tell. We may not receive the complaint, but we like to act before the complaint. In other words, if I am driving home from work, or with my wife on a Sunday, out of the corner of my eye I could spot an Aro top, "how beautiful they are." But I can spot them pretty quick, [fol. 648] and naturally I can spot shrinkage, I can spot seam breakage, and broken zippers and tarnished finish tips, a lot of things the person who owns the car does not consider.

• • • • • • •

[fol. 649] Cross examination.

By Mr. Wolf:

[fol. 650] Q. Will you please tell me which cars you have seen and which you have knowledge of bear patent notices

ostensibly derived from Automobile Body Research Company or their licensees?

A. The only patent notice I have seen on any car is 1955 Oldsmobile, Buick and Cadillac, and probably 1956.

Q. Have you ever seen a notice on the 1952 to 1954 Ford, Mercury and Lincoln?

A. No.

Q. Or the 1955 Lincoln?

A. No.

Q. How about General Motors from 1950 to 1953? And 1954 Chevrolets and Pontiacs?

A. No.

• • • • • • •

[fol. 651] Q. Well, do you know when it was received relative to certain changes that were made in your fabric [fol. 652] top styles? By that I mean you were making fabric tops with what we call a cushion. You received notice, according to what you just testified. Was there any change in that particular structure of the various types of automobile on receipt of that notice?

A. Yes. We immediately changed all our patterns.

Q. Will you please tell me what changes you made after receipt of the notice, and approximately the dates when you made those changes, to the best of your knowledge? For the purposes of clarity I suggest you take the various types of cars individually and run down through those cars.

A. Ford 1952 to 1954 and Mercury, changes were made immediately upon receipt of the notification from a cushion to a shingle.

General Motors, 1950 to 1953, inclusive, and 1954 Chevrolet and Pontiac were immediately changed from a cushion to a shingle.

• • • • • • •

[fol. 653] Q. Now, I believe you testified that the General Motors line of cars followed the same, the replacement top of General Motors followed in general the same line as Ford, Mercury and Lincoln, or if you did not, will you please tell us what the general change of the General Motors line was?

A. The changes in our General Motors line was, the way they are manufactured by Aro is in a very similar construction as the 1955 and 1956 Chevrolet and Pontiac. In other words, no cushion, no wiper arm or shingle.

[fol. 654] Q. What about the replacement tops you now make, 1950 to 1953 General Motors?

A. Those are made with the shingle.

Q. They are still made with the shingle?

A. That is right. I might clarify for the purposes of the record that a shingle is constructed to be above the body line.

Q. I will get into that.

A. I am sorry.

Q. Now, you said that you still use 1950 to 1953 General Motors line of shingle. What about the 1954 model Chevrolet or Pontiac?

A. The same construction.

Q. Shingle?

A. Yes.

Q. Cadillac?

A. Up to 1953 inclusive.

Q. Up to 1953 inclusive you used the shingle, but 1954, 1955 and 1956 Buick, Oldsmobile and Cadillac?

A. No shingle.

Q. Chevrolet and Pontiac, no shingle?

A. That construction is the same, 1955 and 1956.

Q. The tops we are speaking about now are replacement tops made by Aro not the original manufacture?

A. Yes.

* * * * * * *

[fol. 655] Q. I believe I have asked you and you fairly well defined the cushions. Will you please define what you mean by shingle?

A. The shingle has a different appearance than the cush-
[fol. 656] ion. The shingle is a pocket stitched into the side quarter of the top and when installed on the car it is designed to stay about an inch above the body line.

* * * * * * *

[fol. 657] Q. Did you testify earlier that the cushion has a function of appearing attractive?

A. No, I did not.

Q. Could you tell me whether or not it has any design appearance or adds to design attraction?

A. No. The shingle is a much nicer looking outward appearance than the cushion.

* * * * * * * *

[fol. 658] [File endorsement omitted]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

Civil action No. 56-357A

[Title omitted]

ANSWERS TO DEFENDANTS' INTERROGATORIES UNDER RULE 33, F.R.C.P.—Filed October 30, 1956

Now comes Plaintiff and answers certain of the interrogatories propounded to it by Defendants, as follows:

1. a) Plaintiff has three stockholders.

1. b) The stockholders of Plaintiff corporation are: Vivian L. Pollock, 7202 Lynhurst Pl., Chevy Chase, Maryland; Douglas G. Carlson, 5314 Augusta Street, Glen Mar Park, Md.; and Norman E. Quible, 4802—66th Pl., Parkway Knolls, Hyattsville, Md.

2. The officers of Plaintiff are: Vivian L. Pollock, 7202 Lynhurst Pl., Chevy Chase, Md., President; Douglas G. Carlson, 5314 Augusta Street, Glen Mar Park, Md., Secretary; and Norman E. Quible, 4802—66th Pl., Parkway Knolls, Hyattsville, Md., Treasurer.

[fol. 659] 3. a) Plaintiff does not understand the question; but assumes that it asked for the date of incorporation, and that date was, upon information and belief, April 5, 1956.

* * * * * * * *

4. The business address of Plaintiff is: 7202 Lynhurst Pl, Chevy Chase, Maryland.

* * * * * * * *

6. No. Plaintiff does not manufacture or sell any products at the present time, although there is a possibility that Plaintiff may do so in the future.

* * * * * * * *

8. No.

* * * * * * * *

10. No. The only patent under which Plaintiff has a license or in any other way benefits is Mackie-Duluk patent No. 2,569,724.

* * * * * * * *

12. a) No. Plaintiff has not received any income thus far from the patent in suit.

12. b) Objected to.

* * * * * * * *

[fol. 661] Convertible Top Replacement Co., Inc.,
By Vivian L. Pollock, President

[fol. 662] Certificate of Service (omitted in printing).

[fol. 663] [File endorsement omitted]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

Civil Action No. 56-357-A

[Title omitted]

PLAINTIFF'S ANSWER TO DEFENDANTS' INTERROGATORY 12(b)
—Filed December 17, 1956

12(b) No. This answer is based upon the assumption that the question asks for some present source of con-

tinuing or intermittent income from third parties. If the question is meant to ask whether plaintiff has derived any income in the past, then the answer is that plaintiff has received income in the past and expects, through proper business relationships, to receive income in the future. However, there is no present income-producing relationship between plaintiff and other persons or organizations. In particular, plaintiff has not received in the past, and does not presently expect to receive in the future, any income directly or indirectly from Automobile Body Research Corporation.

Convertible Top Replacement Co., Inc., By Vivian L. Pollock, President.

[fol. 664] Certificate of Service (omitted in printing).

[fol. 665] [File endorsement omitted]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

Civil Action No. 56-357-A

[Title omitted]

PLAINTIFF'S REQUESTS FOR ADMISSION—
Filed November 13, 1956

Now comes Plaintiff and, under the provisions of Rule 36, Federal Rules of Civil Procedure, requests that Defendants and each of them, within ten (10) days after service of this request, make the following admissions for the purpose of this action only:

16. Subsequent to receipt of Plaintiff's Exhibit C, inviting the attention of Aro Manufacturing Company to Mackie and Duluk Patent 2,569,724, Aro Manufacturing Company, on advice of its legal counsel, redesigned its

replacement top Part No. 134, to eliminate a cushion which had previously been incorporated into said top.

. . . . . .

[fol. 666] Respectfully submitted,

By Walter Jay Skinner, Attorney for Plaintiff.

[fol. 667] Certificate of Service (omitted in printing).

[fol. 668] [File endorsement omitted]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

[Title omitted]

DEFENDANT'S ANSWER TO PLAINTIFF'S REQUEST FOR ADMISSION—Filed December 6, 1956

Now comes the defendants in the above entitled action and collectively answer the plaintiff's request for admission as follows:

16. The redesigning of the replacement top, Part No. 134, subsequent to receipt of plaintiff's exhibit C, was undertaken in the part because certain structural improvements were required.

. . . . . .

[fol. 669]

Aro Manufacturing Co. Inc., Mae Shapiro, George Shapiro, Marshall Shapiro, Harold R. Shapiro, John Raymond Hamlin.

Certificate of service (omitted in printing).

[fol. 670]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

Civil action No. 56-357 A

[Title omitted]

DEPOSITION OF HAROLD ROBERT SHAPIRO—
February 20, 1957

. . . . . .

[fol. 671] HAROLD R. SHAPIRO, having been first duly cautioned and sworn, on oath deposes and says:

. . . . . .

[fol. 672] Cross examination.

By Mr. Pollock:

. . . . . .

[fol. 673] 134Q. I mean by my question what is the physical reason that you could put your hand in further one time than the other time?

A. The physical reason, the physical difference is that when the cars were originally made by the car manufacturers, they were designed to keep the water out with a weather tight seal.

135Q. Both cars, the Ford and Oldsmobile?

A. That is correct. They were designed to keep the water out. We are deflecting water and relying on any water that did come in, we are relying on the drains.

136Q. Is that in both cars again?

A. That is in both cars.

. . . . . .

[fol. 674] HAROLD ROBERT SHAPIRO, Resumed.

Re-cross examination.

By Mr. Pollock:

. . . . . .

[fol. 675] 281Q. You say that the part No. 204 has a flap which was to be fastened on the inside of the car?

A. Fastened inside and outside both. It was sort of—

282Q. It was a split affair?

A. That is right. We never manufactured them that way, but the original—

283Q. How did you manufacture them?

A. We just went outside of the car, but the original car from Detroit was fastened inside and out.

[fol. 676] Redirect examination.

By Mr. Wolf:

440Q. Can you estimate approximately the number of replacement top manufacturers and replacement top dealers who install replacement tops throughout the United States?

A. How many places install tops?

441Q. Yes.

A. An estimate?

442Q. Yes.

A. I would take a stab in the dark and say 15,000.

[fol. 677] 443Q. Is that a stab in the dark or a reasonable guess or what?

A. That is a reasonable guess.

Mr. Pollock: That is for installing tops?

The Witness: That is right. And that includes custom makers also.

444Q. Do you have any idea of how many replacement tops are made annually in this country of all makes?

A. I have not the slightest idea.

[fol. 678]

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

STENOGRAPHIC RECORD OF TRIAL BEFORE
ALDRICH, D.J.—AUGUST 21, 1958

[fol. 679] COLLOQUY

Mr. Wolf: In so far as repair or reconstruction is concerned, I believe, your Honor, we will offer further testimony on the amount of repair, the degree of repair, the

customs in the trade, the relative importance of the wiper arm in this particular patent as compared with the fabric, the body, and the folding bow structure.

We will offer some evidence as to the cost of the folding bow structure and other testimony indicative of the fact that a repair does not—a repair which is permissible within the scope of the Mackie patent would permit one to replace a fabric top and that the mere replacing of a fabric top does not contribute to an infringement.

* * * * * * *

[fol. 680] HAROLD SHAPIRO, Recalled.

* * * * * * *

[fol. 681] Court Room No. 6,
Federal Building, Boston, Mass.

Redirect examination.

By Mr. Wolf:

* * * * * * *

[fol. 682] Q. In other words, you don't actually use the original top as a model?

A. No. That is evident by placing our 134 over the original 134. The structure is different. Ford Motor Company has engineers that work on these things for three years before they adopt it, from the time it is in the blueprint stage to the time it is a production model, usually three years elapse. We are usually pressed with three hours to get a pattern out because the dealer or somebody wants their car back.

* * * * * * *

[fol. 683] Q. You just described the method of manufacturing original cars. Will you tell us whether the same method could be used in the art of replacements?

A. No, it could not.

Q. Manufacture?

A. No, it could not.

* * * * * * *

[fol. 684] AFTERNOON SESSION

HAROLD SHAPIRO, Resumed.

Redirect examination.

By Mr. Wolf, continued:

• • • • • • •

[fol. 685] Q. I pose the question: If the wiper arm is missing, from your knowledge do you ever find this wiper arm to be missing more than on an odd occasion?

A. We have never seen one missing on a Ford. It is a common occurrence on, well, I couldn't say common occurrence, but it would happen, oh, one out of ten or fifteen on a General Motors car.

• • • • • • •

[fol. 686] Q. You also mentioned previously that occasion-
[fol. 687] ally you find prongs missing or the trough rusted. What do you do when you get conditions of this nature on cars of this type?

A. Well, there are two ways to do it. One way is to just leave the flap inside and use the screws that held the recess well cover on, or it could be bent up in the fashion demonstrated today, and snapped on the outside.

Q. I see. Do you know if this has been done?

A. Yes, it has been done.

Q. Have you seen it done?

A. Yes, I have.

Q. When does this most often occur, this type of difficulty?

A. Well, I would say, getting along about now, from here on in probably some of these drain troughs will be rusted out and become inoperative, and screws will be rusted in there.

Q. You must be referring to a specific car when you say "starting about now."

A. Yes. The 1952 Fords.

• • • • • • •

[fol. 688]

IN UNITED STATES COURT OF APPEALS
FOR THE FIRST CIRCUIT

No. 5488

ABO MANUFACTURING CO., INC., et al.,
Defendants, Appellants,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.,
Plaintiff, Appellee.

BRIEF FOR DEFENDANTS, APPELLANTS

[fol. 689] QUESTIONS PRESENTED

The questions presented in this appeal are:

1. Is not an individual entitled to maintain or have maintained in working condition, a patented combination rightfully acquired by having replaced a part which expectedly became worn or defective before other integral parts of the patented combination without paying a second royalty?

2. Where a patented combination recites as one element in the combination, an unpatentable component which is normally manufactured as an appendage to much larger wearable and non-patentable structure, may not such structure be replaced together with the appendage?

3. Does one infringe a patent by replacing an unpatentable component of a patented combination in a manner which was not disclosed as operable by the patentee?

4. Does the sale of an unpatentable component for replacing a worn element of a patented combination constitute contributory infringement under 35 U.S.C. § 271 (1952).

[fol. 690] NARRATION OF EVENTS

Replacement techniques and styling of the replacement top vary from that practiced by the original automobile manufacturer, often resulting in a replacement top appearing, and secured in many instances in a different manner from the original installation.

• • • • • • •

[fol. 691] ARGUMENT

Replacing Worn Fabric Tops Is a Permissible Repair Under the "Common Sense" Doctrine Established by the Supreme Court and Followed in This Circuit.

A number of cases have considered the problem of what constitutes permissible repair as compared with a non-permissible reconstruction of the patented combination. In many instances it is rather difficult to draw a line between permissible repair and unpermissible reconstruction. In considering these cases, courts have evolved several tests in attempting to properly classify acts as being permissible or not. The dominant view which is followed in this particular circuit was established by the Supreme Court in *Heyer* v. *Duplicating Mfg. Co., supra* at 17, where the court applied what might be termed "a common sense" doctrine. In that case the court said:

> We have only to establish the construction of a bargain on principles of common sense applied to the specific facts . . . 263 U.S. at 102.

[fol. 692] This doctrine has been carefully followed by this court where it stated in the leading case of *Goodyear Shoe Mach. Co.* v. *Jackson, supra* at 18:

> A purchaser, then, may repair, but not reconstruct or reproduce, the patented device or machine. Repair is "restoration to a sound, good, or complete state after decay, injury, dilapidation, or partial destruction." Reconstruction is "the act of constructing again." Reproduction is "repetition," or "the act of reproducing."

• • •

These definitions are instructive in bringing home to the mind that repair carries with it the idea of restoration after decay, injury, or partial destruction, and that reconstruction or reproduction carries with it the idea of complete construction or reproduction over again.

But the difficult question still remains, what is legitimate repair, and what is reconstruction or reproduction as applied to a particular patented device or machine? When does repair destroy the identity of such a device or machine and encroach upon invention? At what point does legitimate repair of such device or machine end, and where does illegitimate reconstruction begin?

It is impracticable, as well as unwise, to attempt to lay down any rule on this subject owing to the number and infinite variety of patented inventions. *Each case, as it arises must be decided in the light of all the facts and circumstances presented, and with an intelligent comprehension of the scope, nature, and purpose of the patented invention, and the fair and reasonable intention of the parties. Having clearly in mind the specification and claims of the patent, together with* [fol. 693] *the condition of decay or destruction of the patented device or machine, the question whether its restoration to a sound state was legitimate repair, or substantial reconstruction or reproduction of the patented invention, should be determined less by definitions or technical roles than by the exercise of sound common sense and an intelligent judgment.* (Emphasis added) 112 Fed. at 150.

While courts of other circuits have also discussed what constitutes the dominant element of the invention, most still apparently apply the rationale of the "common sense" doctrine. See *Landis Machine Co.* v. *Chaso Tool Co.*, 141 F.2d 800 (6th Cir.), *cert. denied*, 323 U.S. 720 (1944).

It is not clear what doctrine the district court applied in concluding that replacing worn fabric tops constituted reconstruction of the patented combination rather than per-

missible repair. Regardless of what doctrine is applied its conclusion is unsound. The application of the "common sense" doctrine requires a review of (a) what Mackie and Duluk *claimed* as their invention in the light of the relevant prior art, (b) the normal expectation of vendors of convertible automobiles, (c) the normal expectation of purchasers of convertible automobiles, (d) the rewards already received by the plaintiff's assignor, (e) the fact that the fabric tops are frequently replaced, (f) the custom of the replacement trade in replacing the tops and, (g) that the fabric top itself is old and unpatentable.

[fol. 694]

IN UNITED STATES COURT OF APPEALS
FOR THE FIRST CIRCUIT

STIPULATION RE EXHIBITS

On May 11, 1959, the following stipulation was approved and filed:

"Now come the parties in the above-entitled appeal and stipulate, subject to the approval of the Court, that the following exhibits shall be before the Court in physical form in this appeal with the same force and effect as if such exhibits were physically reproduced as a record appendix.

Plaintiff's exhibits 11A to 11E inclusive
Defendants' exhibit K
Defendants' exhibit L
Defendants' exhibit M
Defendants' exhibit N
Defendants' exhibit N'
Defendants' exhibit O
Defendants' exhibit P
Defendants' exhibit R
Defendants' exhibit S
Defendants' exhibit T
Defendants' exhibit T'
Defendants' exhibit U
Defendants' exhibit V

Defendants' exhibit W
Defendants' exhibit X
Defendants' exhibit Y
Defendants' exhibit MM
Plaintiff's exhibits 1, 2, 3, 4, 5, 6, 10, 12, 13, 14, 15A to 15B, 16A to 16B, 26A to 26B, 17

[fol. 695] April 29, 1959

Aro Manufacturing Co., Inc. et al., By David Wolf, Attorney for Defendants, Appellants, Ezekiel Wolf, Wolf & Greenfield, 82 Devonshire Street, Boston 9, Massachusetts.

May 4, 1959

Convertible Top Replacement Co., Inc., By Paul V. Power, Attorney for Plaintiff, Appellee, Gaston, Snow, Motley & Holt, 82 Devonshire Street, Boston 9, Massachusetts.

Approved:

C. Magruder, Ch. J.

MINUTE ENTRIES

Thereafter on May 22, 1959, appellee filed a motion to permit introduction into the record of additional license agreements which motion was denied by the Court on June 2, 1959.

Thereafter on June 4, 1959, this cause came on to be heard and was fully heard by the Court, Honorable Calvert Magruder, Chief Judge, and Honorable Peter Woodbury and [fol. 696] Honorable John P. Hartigan, Circuit Judges sitting.

[fol. 697]

IN UNITED STATES COURT OF APPEALS
FOR THE FIRST CIRCUIT

No. 5488.

ARO MANUFACTURING CO., INC., et al.,
Defendants, Appellants,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.,
Plaintiff, Appellee.

Appeal from the United States District Court for the District of Massachusetts.

Before Magruder, Chief Judge, and Woodbury and Hartigan, Circuit Judges.

David Wolf and Charles Hieken, with whom Ezekiel Wolf, Wolf & Greenfield was on brief, for appellants.

Elliott I. Pollock, with whom Paul V. Power was on brief, for appellee.

OPINION OF THE COURT—August 31, 1959

Woodbury, Chief Judge. This is an appeal from an interlocutory judgment ordering, adjudging and decreeing that claims 3, 4, 5, 7, 8, 9 and 10 of United States Patent No. 2,569,724, issued on October 2, 1951, to Harry A. Mackie and Stanley Duluk for "Convertible Folding Top with Automatic Seal at Rear Quarter" are valid and have been infringed by the defendants, that the defendants, their officers, agents and servants be enjoined from further infringement, and that the question of the plaintiff's damages for past infringement be referred to a Master.

The plaintiff-appellee, Convertible Top Replacement Co., [fol. 698] Inc., is the possessor by territorial grant of the right, title and interest in and to the Mackie-Duluk patent in and for the Commonwealth of Massachusetts together

with all rights of action accruing since December 30, 1953, for infringement thereof in the Commonwealth. The defendants manufacture and sell, for replacement purposes only, the fabric portions of convertible tops which they either install themselves or sell pre-fabricated for installation by trimmers, that is to say, persons engaged in the business of putting on new tops, repairing upholstery etc., and, to an insignificant extent, to do-it-yourself car owners. The defendants' tops are custom-designed by make of car and year of manufacture to permit accurate replacements on all standard cars manufactured in the United States and are so advertised. They pre-fabricate and keep in stock the fabric parts only of convertible tops for various models of cars manufactured by the Ford Motor Company from 1952 to 1955, and for many models of General Motors cars manufactured for the years 1950 to 1954, when many convertible automobiles produced by those two manufacturers were equipped with Mackie-Duluk tops.

The District Court resolved the issue of the validity of the claims of the Mackie-Duluk patent in suit in favor of the plaintiff. It said: "Mackie-Duluk was a substantial and enlightened step, filling a long-felt want, in a field in which defendants have produced, with one exception, only paper patents, the most emphasized being foreign, which did not even purport to do what Mackie-Duluk accomplished." On this appeal, however, the question of validity has hardly been argued at all and we are not at all sure that all the evidence on that issue has been included in the parts of the record printed in the joint record appendix before us. Under these circumstances we can only take the validity of the patent claims in suit for granted [fol. 699] and turn immediately to the hotly contested issue of infringement.

The basic question argued before us on this appeal is whether the defendants, by manufacturing and selling replacement convertible top fabrics cut to fit and adapted for use in the combination of elements covered by the plaintiff's patent, are guilty of contributory infringement as defined in Title 35, U.S.C. § 271(c), or whether, in doing what they did, they merely were making a permissible replacement of a part which expectedly became worn out or

defective sooner than other parts of the patented combination.

In addressing ourselves to this question we turn first to the patent in suit and its prior art.

Folding tops for vehicles consisting of bows of wood or metal covered with a flexible waterproof fabric (in the days of "The Deacon's Masterpiece; or, The Wonderful 'One-Hoss Shay'"[1] with leather) are, of course, as old as the automobile art which in the beginning only adopted with necessary modifications the much older art of collapsible tops for chaises, buggies and some other horse drawn vehicles. The rear panels of the folding tops of earlier days were fastened permanently at the bottom to the outside of the top of the rear portion of the body of the vehicle, and the quarters, the rear portions of the sides of the vehicle, if protected at all, were protected with flaps or curtains, sometimes integral with the top and sometimes not, fastened at the bottom to the outside of the top of the body with buttons, snaps or some equivalent means of fastening. Naturally, to prevent tearing, these quarter flaps had to be unfastened by hand when the top was lowered and when the top was put up fastened again by [fol. 700] hand for neat appearance and also to prevent the entrance of rain. This manual fastening and unfastening of the bottoms of the quarter flaps presented no great problem until the advent of the so-called convertible automobile with a folding top operated mechanically rather than manually. The problem presented by the quarter flaps of tops of this kind was first partially solved by fastening the bottom of the flap to the outside of the top of the body of the vehicle with "releasable fastening means," that is to say, with some sort of slide fastening device which would detach automatically when the top was lowered. The major part of the problem remained, however, for when the top was put up the flaps had to be fastened manually, which meant that the operator was required to get out of the car altogether, or at least to reach out, often, of course,

[1] Poem by Oliver Wendell Holmes, 1857-1858:

"Boot, top, dasher, from tough old hide
Found in the pit when the tanner died."

in the rain. The object of the Mackie-Duluk patent was "to provide an automatic fastening and sealing means at the top and sides of the tonneau of the convertible" which "never has to be operated or touched by the driver of the car." And, as we have already indicated, the District Court found that the patentees succeeded in attaining their object by devising a patentable combination of elements.

The Mackie-Duluk device consisted of providing an elongated flap integral with the quarter sections of the fabric top adapted to be permanently fastened at the bottom deep within the body of the car, at or perhaps below, but certainly not in front, of the axis of rotation of the bows, to a trough welded to the body of the car and provided with a drain to carry off water entering between the flap and the car body. In addition, to minimize the entrance of water between the body and the flap, they provided a "wiper arm" so-called, which in effect acted as an additional, low, rearward bow pressing the downwardly extending flap outwardly against the top of the body of the vehicle as the top is raised from its folded position to close, or [fol. 701] substantially to close, any gap there might be between the inside of the top of the body of the car and the flap extending downward into the interior of the automobile body.

Claim 8 of the patent may be taken as typical of those in suit. It reads:

> "In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down, a rain trough secured to the bottom of said flexible top material and to said panel on the inside and below the top of the metal body or tonneau, said flexible top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, and a wiping arm secured to a part of the movable bow structure and acting simultaneously with said bow structure to engage the inside lower portion of the top material in raising the top to press the two adjoining members

toward each other and thereby produce a weather seal therebetween."

The defendants, as we have said, manufacture and sell only the fabric part of the convertible top structure. And from this they argue at length that, since fabric tops stretched over bows are admittedly very old in the vehicle art, they are only producing an unpatentable component of the combination covered in the patent in suit. If the argument were sound "there would be nothing to discuss," as the Court pointed out in *Heyer* v. *Duplicator Mfg. Co.*, 263 U.S. 100, 101 (1923). The argument, however, is unsound for the Mackie-Duluk patent does not broadly cover the fabric portion of a folding top of any form or shape. [fol. 702] It specifically covers the fabric part of such a top of a particular form or shape, *i.e.*, one with elongated flaps at the rear quarters designed to extend deep within the body of the convertible automobile for permanent attachment to a rain trough at or below the axis of rotation of the bows. It is true that the District Court found that it was not new to bring "the fabric from outside the tonneau at the rear quarters, inside." But it found that the patentees were the first to extend the flaps down far enough so that their bottom lines were at the axis of rotation of the bows and to show that there the fabric could be permanently attached to the bows and the tonneau without ripping when the top was lowered or raised, and that therein lay the patentable novelty of the patentees' fabric.[2]

Form being patentable in itself, see *Wilson* v. *Simpson*, 9 How. 108, 123 (1850), in which it is said: "Form may be given to a piece of any material,—wood, metal, or glass—so as to produce an original result, or to aid the efficiency of one already known, and that would be the subject for

[2] Since the element replaced by the defendants-appellants was a patented component of the Mackie-Duluk combination, the cases of *Morgan Envelope Co.* v. *Albany Paper Co.*, 152 U.S. 425 (1894), and *Micromatic Hone Corp.* v. *Mid-West Abrasive Co.*, 177 F.2d 934 (C.A. 6, 1949), upon which they rely, are not in point, for the elements replaced by the defendant in those cases, the roll of toilet paper and the abrasive stone, respectively, were not patented elements of the devices covered by the patents there in suit.

a patent," we come to the question whether the shape of the patentees' fabric constituted "a material part of the invention" within the meaning of that phrase as used in § 271(c) of Title 35 U.S.C. quoted in the margin.[3]

[fol. 703] Reading this section in the light of the earlier decisions to be considered presently we do not think it could have been intended to prevent the rightful owner of a patented machine from making repairs to a broken, worn or defective part, even though covered by the patent, either himself or through someone other than the patentee. Nor do we think the section is to be read to prevent the owner of a patented machine from replacing from a source other than the patentee minor patented parts of a combination which in the normal use of the machine may be expected frequently to wear out or break and hence to require replacement at short intervals to keep the whole machine in working order and condition. That is to say, we think the rule stated and applied in *Wilson* v. *Simpson*, 9 How. 108 (1850), and *Heyer* v. *Duplicator Mfg. Co.*, 263 U.S. 100 (1923), is still the rule under Title 35 U.S.C. § 271(c).

In the *Wilson* case the Court held that the owner of a patented planing machine had the right to keep his machine in operation by replacing the patented cutting knives therein from sources other than the patentee, it appearing that the knives, although an essential element of the patented combination, could be expected in the normal use of the machine to wear out, become useless and require replacement at least every sixty or ninety days. In reaching this result the Court said at page 125:

> The right of the assignee [the owner of the machine] to replace the cutter-knives is not because they are of perishable materials, but because the inventor of the machine has so arranged them as a part of its combination, that the machine could not be continued

[3] Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a stable article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer."

in use without a succession of knives at short intervals. Unless they were replaced, the invention would have been but of little use to the inventor or to others. The other constituent parts of this invention, though liable [fol. 704] to be worn out, are not made with reference to any use of them which will require them to be replaced. These, without having a definite duration, are contemplated by the inventor to last so long as the materials of which they are formed can hold together in use in such a combination. No replacement of them at intermediate intervals is meant or is necessary. They may be repaired as the use may require. With such intentions, they are put into the structure. So it is understood by a purchaser, and beyond the duration of them a purchaser of the machine has not a longer use. But if another constituent part of the combination is meant to be only temporary in the use of the whole, and to be frequently replaced, because it will not last as long as the other parts of the combination, its inventor cannot complain, if he sells the use of his machine, that the purchaser uses it in the way the inventor meant it to be used, and in the only way in which the machine can be used."

In *Heyer* the question was whether the owners of certain costly and durable patented duplicating machines were entitled to replace from any source they chose the patented bands of gelatine used in the machines for transferring the print to be multiplied, which bands were of a size, were attached to spools adapted for, and were intended for use in the patented machine. In answering this question in the affirmative the Court specifically pointed out that while the machine might last indefinitely the bands were exhausted after limited use, about one hundred copies, and were "cheap and common articles of commerce." Reaffirming the *Wilson* case it said:

"The owner when he bought one of these machines had a right to suppose that he was free to maintain it [fol. 705] in use, without the further consent of the seller, for more than the sixty days in which the present gelatine might be used up."

And then the Court said that in cases of this sort the judicial function is "only to establish the construction of a bargain on principles of common sense applied to the specific facts."

When replacement of a patented component of a patented combination constitutes a legitimate repair and when it constitutes a forbidden reconstruction of the combination of which it forms a part is difficult to determine and cannot be determined by the application of any verbal formula. Each case must be decided on its own facts, pretty much as an individual instance. This court put the problem neatly and succinctly in *Goodyear Shoe Machinery Co.* v. *Jackson*, 112 Fed. 146, 150 (C.A. 1, 1901), wherein it is said:

> "It is impracticable, as well as unwise, to attempt to lay down any rule on this subject, owing to the number and infinite variety of patented inventions. Each case, as it arises, must be decided in the light of all the facts and circumstances presented, and with an intelligent comprehension of the scope, nature, and purpose of the patented invention, and the fair and reasonable intention of the parties. Having clearly in mind the specification and claims of the patent, together with the condition of decay or destruction of the patented device or machine, the question whether its restoration to a sound state was legitimate repair, or a substantial reconstruction or reproduction of the patented invention, should be determined less by definitions or technical rules than by the exercise of sound common sense and an intelligent judgment."

[fol. 706] Applying as best we can the "common sense" test of the case last cited and the *Heyer* case we conclude that the defendants were not making permissible repairs to, but were substantially reconstructing, the convertible top combination covered by the Mackie-Duluk patent. Couched in terms of the statute, we think they were making and selling a component of the plaintiff's patented combination "constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a stable

article or commodity of commerce suitable for substantial noninfringing use."[4]

In substantiation of this conclusion we point out that the fabric portion of the top is not a minor or relatively inexpensive component of the patented combination, or a part of the invention which expectably would wear out after a very short period of use, like the cutter-knives in the *Wilson* case or the bands of gelatine in the *Heyer* case. There was testimony, and the court below found, that barring accidental damage the average life of a convertible top was about three years, although with care under favorable conditions or in the hands of a person not too fastidious as to appearance it would last much longer. The expectable life span of the fabric is no doubt shorter than the expectable life span of the other components of the convertible top and of the car itself. But the life of the [fol. 707] fabric is not so short, nor is the fabric so cheap, that we can safely assume that an owner would rationally believe that in replacing it he was making only a minor repair to his top structure. On the contrary, we believe that replacing the fabric would be counted a major reconstruction of the top assembly. In short, we agree with the District Court's finding of infringement.

Other arguments advanced by the appellants have been considered but are rejected as too insubstantial to call for discussion.

Judgment will be entered affirming the judgment of the District Court.

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[4] The appellants do not establish that their prefabricated tops of which complaint is made are stable articles or commodities of commerce "suitable for substantial noninfringing use," and thus escape application of the statute, by pointing out that the tops it pre-fabricates for convertibles having the Mackie-Duluk structure can be applied in a noninfringing way by cutting off the flaps and putting on snap fasteners to cooperate with the snap fasteners on the outside of the top of the tonneau to hold the cover or boot customarily provided to cover the top and protect it from dust when the top is down. The fact remains that the appellants do not make tops for Mackie-Duluk equipped convertibles for application in the old fashioned prior art way but only in the way shown in the Mackie-Duluk patent.

IN THE UNITED STATES COURT OF APPEALS
FOR THE FIRST CIRCUIT

JUDGMENT—August 31, 1959

This cause came on to be heard from the United States District Court for the District of Massachusetts, and was argued by counsel.

Upon consideration whereof, It is now here ordered, adjudged and decreed as follows: The judgment of the District Court is affirmed.

By the Court: Roger A. Stinchfield, Clerk.
By Dana H. Gallup, Chief Deputy Clerk.

Thereafter, on September 9, 1950, appellants filed a petition for rehearing which was denied by the Court on September 15, 1959.

[fol. 708] Thereafter, on September 24, 1959, mandate was stayed until further order of Court.

[fol. 709] Clerk's Certificate to foregoing transcript omitted in printing).

[fol. 711]

SUPREME COURT OF THE UNITED STATES

No. 582—October Term, 1959

ARO MANUFACTURING CO., INC., et al., Petitioners,

vs.

CONVERTIBLE TOP REPLACEMENT CO., INC.

ORDER ALLOWING CERTIORARI—February 29, 1960

The petition herein for a writ of certiorari to the United States Court of Appeals for the First Circuit is granted.

And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

OFFICE COPY

VOLUME III

TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, ~~1959~~ 1960

No. ~~582~~ 21

ARO MANUFACTURING CO., Inc. ET AL.,
PETITIONERS,

vs.

CONVERTIBLE TOP REPLACEMENT CO., INC.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS
FOR THE FIRST CIRCUIT

PETITION FOR CERTIORARI FILED DECEMBER 11, 1959
CERTIORARI GRANTED FEBRUARY 29, 1960

INDEX

Volume II

Plaintiff's Exhibit:

No. 2. Certified copy of file wrapper and contents of patent in suit 405

No. 7. Defendants' brochure, copyrighted in 1952, 1953 and 1954 461

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Patent 2,549,153, J. W. J. Ackermans	567
Patent 2,289,173, F. C. Best	579
Patent 2,569,724, H. A. Mackie et al.	589

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CERTIFICATION D
NOVEMBER 1955—2,000

William Filar

REGISTER OF COPYRIGHTS

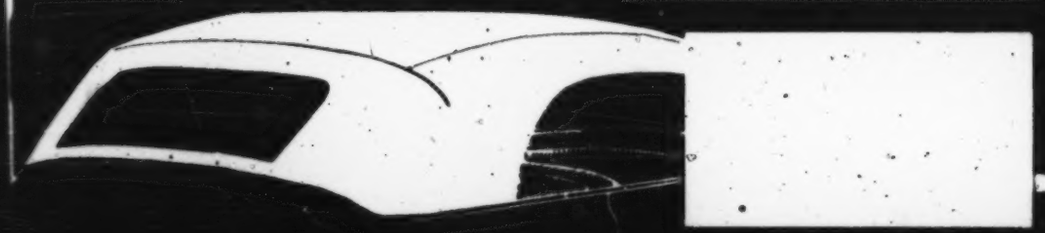
PLAINTIFF'S EXHIBIT NO. 7

491

MICRO CARD
TRADE MARK ®
22
MATTHEW BENDER & COMPANY
MB
60
862
microcard

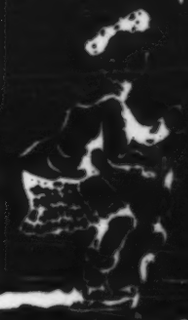
ARO PRODUCTS

"TOP Profits at a Minimum Investment"

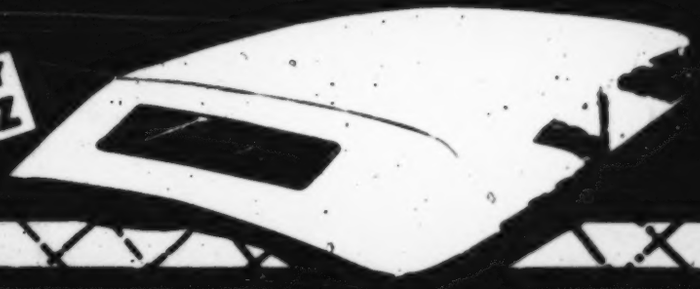


HOOT MON! HERE'S THE NEW

ARO **KILTY** TOP



FABRIC BY HAARTZ



ARO TOP PADS

and Rear Quarter Pads

ARO FRONT BOWS

HEADER RAILS

FOR FORDS and MERCURYS

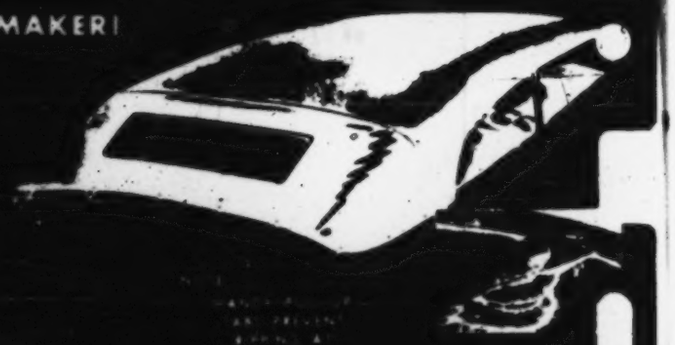
1938 to 1948

A YEAR ROUND MONEY MAKER!

ARO

Plastic

PROTECT-A-TOP



POINTS THE WAY TO TOP PROFITS

ARO CONVERTIBLE TOPS
ABOVE THEM ALL
World's Oldest and Largest Makers
UNEQUALLED!
ARO IS THE PIONEER MAKER OF
VERTIBLE TOPS THE WORLD'S
OUTSTANDING LEADER
HAARTZ FABRIC EXCLUSIVELY
ACCURATE
KNOW HOW
EASY INSTALLATION
THAT'S WHY ALTHOUGH
IMITATORS HAVE APPEARED
THERE'S NO REPLACEMENT
TOP LIKE AN ARO
ARO TOP SALES CO
ARO "STORM KING"
ARO "REGAL"
ARO "DE LUXE"
MODEL IDENTIFICATION

Famous ARO PRODUCTS.. Point the

CURRENT PRICE LIST

Cost Prices Are Listed by Letter A, B, C, etc.
Consult Current Price Bulletin for Key

FORD MERCURY LINCOLN

GENERAL MOTORS

GENERAL MOTORS Continued

GENERAL MOTORS CONVERTIBLE SEDAN

CHRYSLER MOTORS

ALL TOPS COMPLETE WITH FABRIC CURTAINS — PLASTIC CURTAIN ADDITIONAL

USING FABRIC BY HAARTZ Exclusively!

No finer fabric than HAARTZ
No finer top than ARO

ARO *Convertible Tops are Available for all cars from 1928 Year to Current Models*

Famous ARO CONVERT

FORD—MERCURY—LINCOLN

GENERAL MOTORS

GENERAL MOTORS (continued)

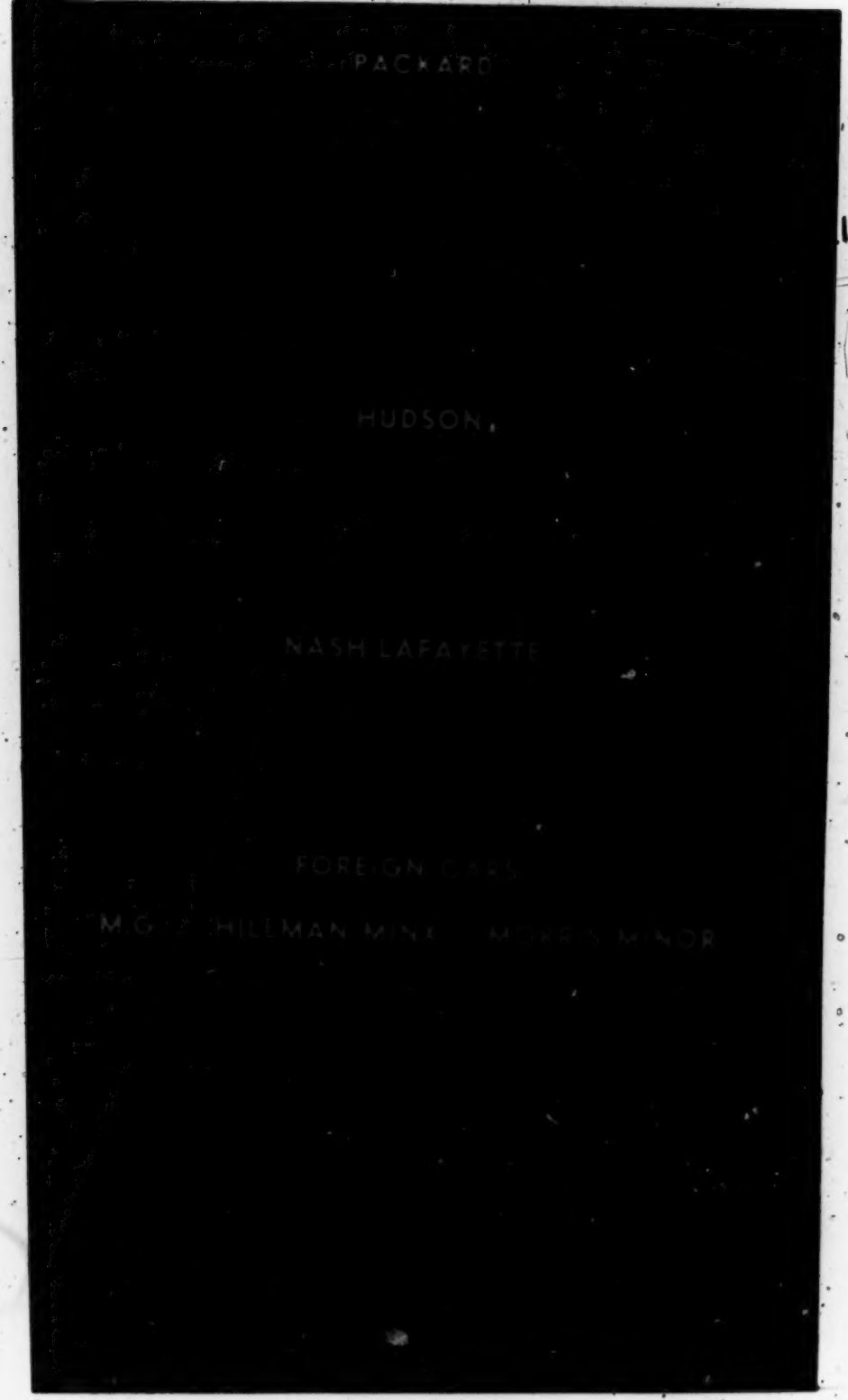
CHRYSLER MOTORS

STUDEBAKER

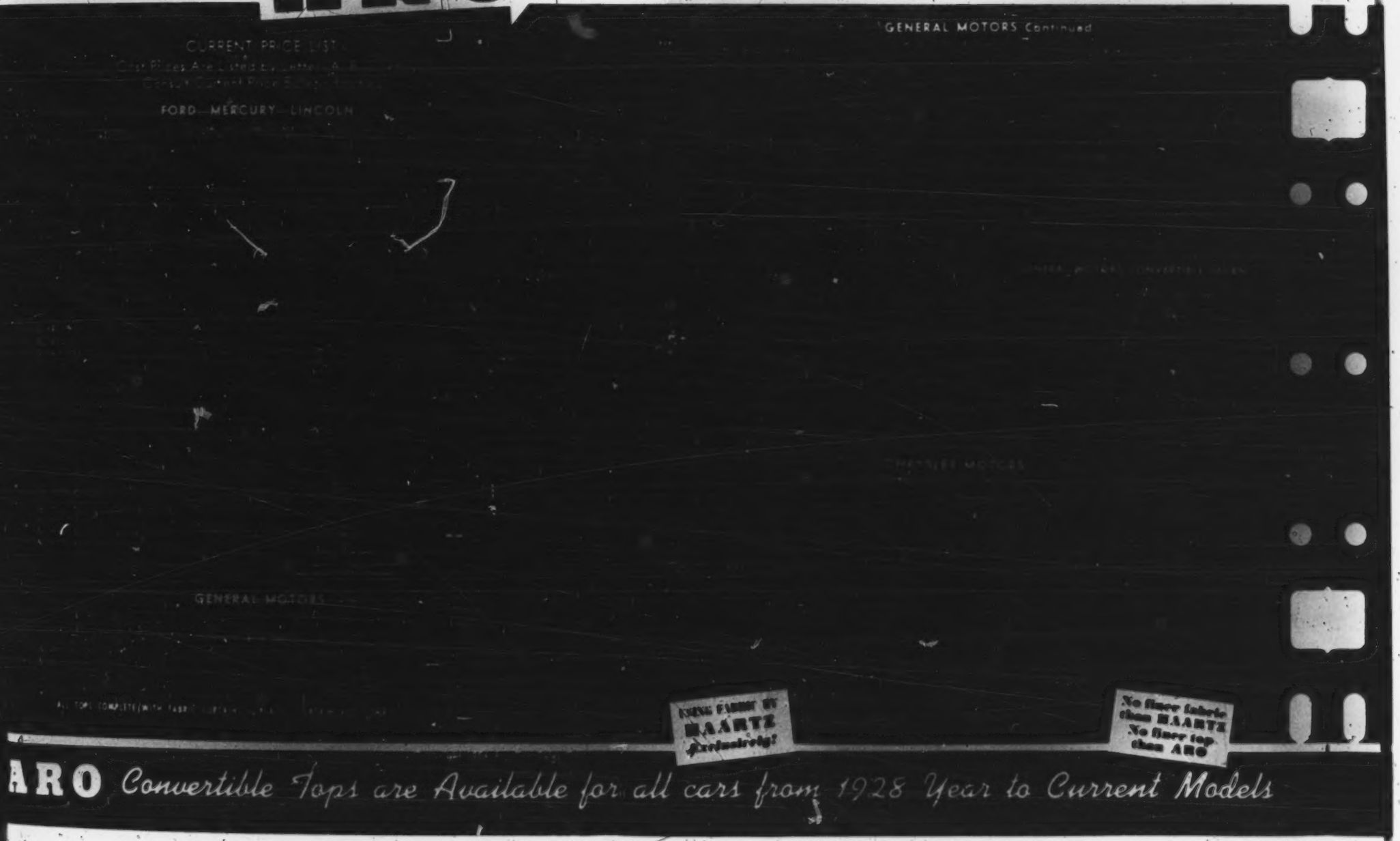
WILLYS

CROSLEY

TIBLE TOPS


PACKARD
HUDSON
NASH LAFAYETTE
FOREIGN CARS
M.G. HILLMAN MINX MORRIS MINOR

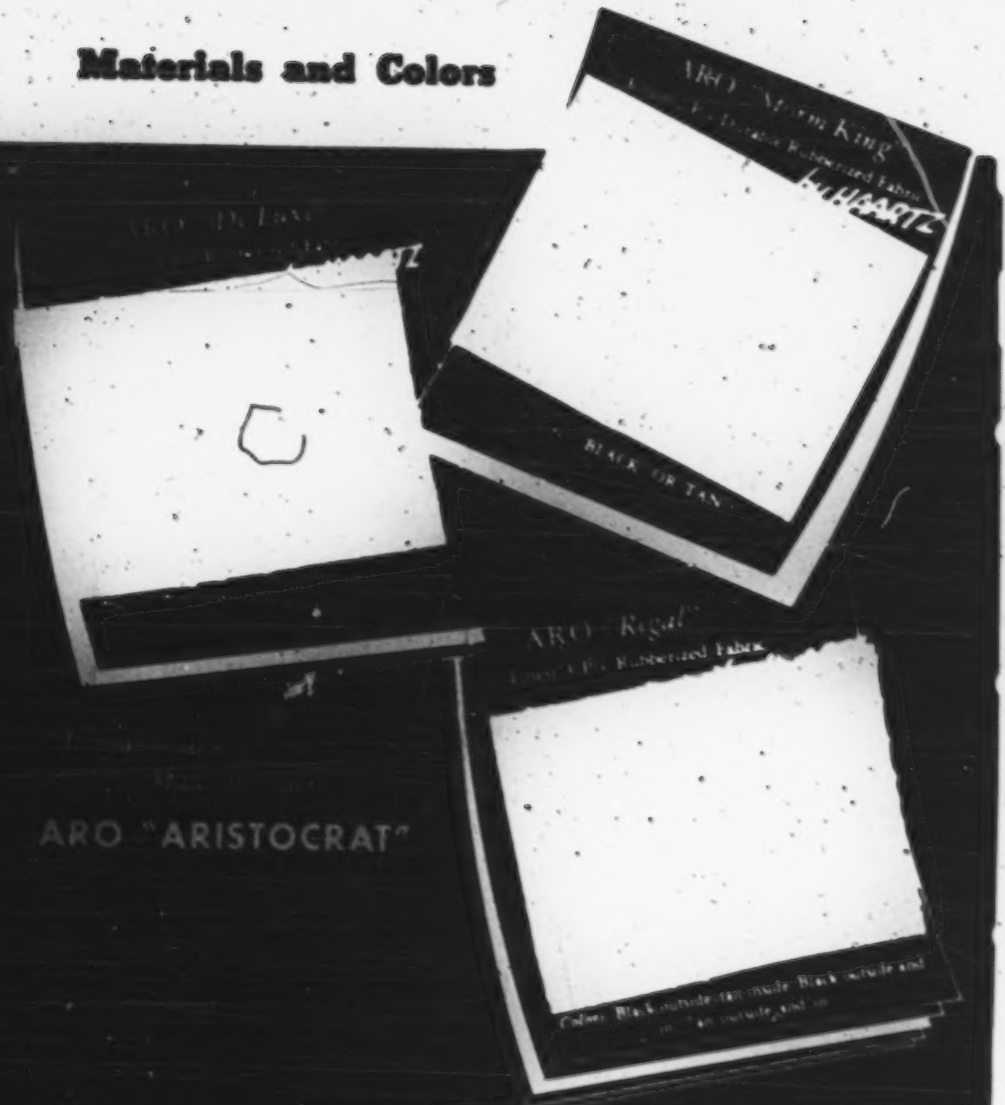
Famous ARO PRODUCTS.. Point the



ARO *Convertible Tops are Available for all cars from 1928 Year to Current Models*

Way to Higher Profits

Materials and Colors



ARO "ARISTOCRAT"

ARO "HARMONY"

ARO FABRICS COME FROM THE SAME MANUFACTURER THAT SUPPLIES OVER 90% OF DETROIT'S AUTO MAKERS

ARO TOP SALES CO.
Telephone ALgonquin 4-5250

1089 COMMONWEALTH AVE
BOSTON 15, MASS

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CERTIFICATION D
NOVEMBER 1954—5,000

Arthur Fisher

REGISTER OF COPYRIGHTS

PLAINTIFF'S EXHIBIT NO. 8

467

ARO PRODUCTS

"TOP Profits at a Minimum Investment"

ARO *Plastic* PROTECT-A-TOP

ARO TOP PADS

and Rear Quarter Pads

ARO FRONT BOWS

HEADER RAILS

FOR FORDS and MERCURYS

1938 to 1948

ARO

WORLD'S OLDEST AND LARGEST MAKERS OF REPLACEMENT CONVERTIBLE TOPS

Reasons for ARO TOP Leadership:

1
2
3
4

AND ARO TOPS ARE MADE EXCLUSIVELY OF

FAMOUS HAARTZ JONARTS SPORTS FABRIC

ARO TOP SALES CO 1089 Commonwealth Ave BOSTON 15 MASS

Phone Algonquin 5-52

PLAINTIFF'S EXHIBIT NO. 9a

[Letterhead, Moore and Hall]

January 2, 1954

Registered—Return
Receipt Requested

President
Aro Manufacturing Company
1089 Commonwealth Avenue
Boston, Massachusetts

Dear Sir:

Our client, Automobile Body Research Corporation of Ruxton, Maryland, a corporation of Maryland, is the owner of United States Patents 2,549,153 and 2,569,724. The first of these patents has been held valid and infringed in the case of *Ackermans* v. *General Motors Corporation*, 202 F.2d 642. Petition for a writ of certiorari filed by General Motors Corporation was denied, as was a petition for rehearing.

During the settlement of the General Motors case, we acquired from General Motors Corporation for the sum of $80,000.00 the Mackie and Duluk Patent 2,569,724.

We have reserved the right to license those replacement fabrics for convertible automobiles which, if sold without any consent on the part of the patentee, would constitute contributory infringement (under 35 U.S.C. 271) of the Ackermans patent. While General Motors Corporation has reserved a non-exclusive license under Patent 2,569,724, no other licenses are outstanding. It is obvious, from the foregoing and from an inspection of the convertible automobile sold by the Ford Motor Company, that anyone selling ready-made replacement fabrics for these automobiles would be guilty of contributory infringement of said patents. We understand that you have been selling such fabrics and also ready-made fabrics for General Motors convertibles. If this be the case, you have, therefore, been

guilty of contributory infringement of the aforesaid Ackermans Patent 2,549,153.

General Motors Corporation has agreed to pay us a 5% royalty on replacement fabrics which it manufactures for its cars, and which would constitute contributory infringement of said Ackermans patent.

We are willing to grant you or your suppliers a license under both of the aforesaid patents for a 5% royalty. The royalty is to be computed on only those replacement fabrics which would constitute contributory infringement if sold without the patentee's consent.

Sincerely yours,
William D. Hall

WDH:tp

PLAINTIFF'S EXHIBIT NO. 9b

[Letterhead, Ezekiel Wolf]

February 23, 1954.

Moore & Hall
1200 Eighteenth Street, Northwest
Washington 6, D.C.

Gentlemen:

Your letter of January 2, 1954 addressed to President, Aro Manufacturing Company, 1089 Commonwealth Avenue, Boston, Massachusetts, has been referred to me for reply.

We have briefly considered the two patents which you mentioned in your letter and can state that my clients would be willing to consider a license under the patents mentioned if they could be assured that they would be fully protected to the extent that infringers of these patents would be vigorously prosecuted for infringement unless they also became licensees on the same basis.

We should be glad to hear from you on the basis as outlined above.

Very truly yours,
(s) Ezekiel Wolf

EW/r

PLAINTIFF'S EXHIBIT NO. 9d

[Letterhead, Ezekiel Wolf]

May 10, 1954.

Moore & Hall
1200 Eighteenth Street, Northwest
Washington 6, D.C.

Re: *Aro Manufacturing Co.*

Gentlemen:

In response to your letter of May 8, 1954, I am enclosing herewith a new rough sketch of the construction used by the Aro Manufacturing Company in connection with automobiles having guide bars as disclosed in the Mackie patent.

You will of course understand that not all automobiles use the particular construction as disclosed in this patent and that the replacement top manufactured by the Aro Manufacturing Company is adaptable for use with automobiles of entirely different construction.

In the construction utilized by the Aro Top Manufacturing Company, the fabric material is provided with a flap as previously disclosed. This flap fits over the top of the body line and acts quite similar to a shingle element. In installing this top in automobiles having elements similar to those as shown in Figure 2 of the Mackie patent, the rubber molding elements 27 are first removed in order to make room for the flap member.

It is true the guide bars 10 and 11 are allowed to remain. However these guide bars in the replacement construction as made by the Aro Manufacturing Company, operate in an entirely different fashion than as originally designed and claimed in that patent.

In a replacement arrangement this acts solely as a guide bar and not as a wiping arm for pressing the top material against the inside of a sealing strip. In view of this distinct difference in operation, we again repeat there cannot be any reasonable basis for a claim of infringement.

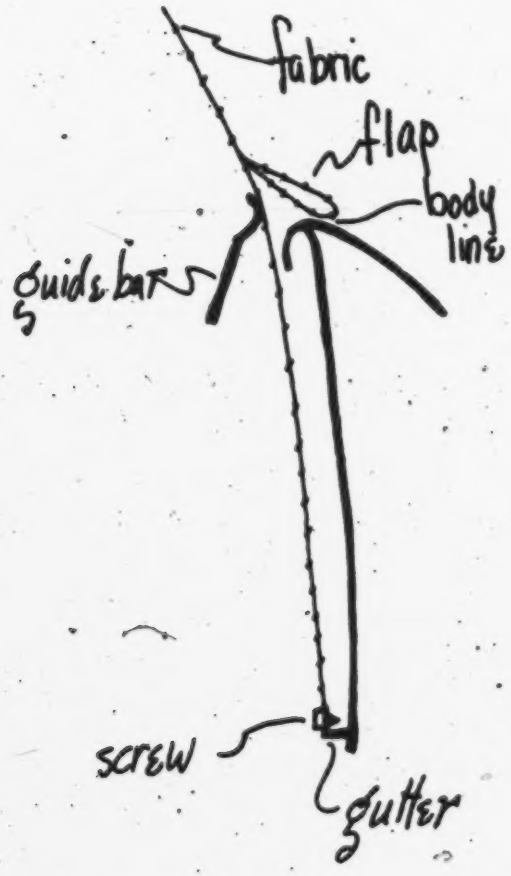
I have called to the attention of our clients, your difficulty of seeing one of the Aro Manufacturing Company's tops installed on a car, and I feel certain that the Aro Manufacturing Company would be glad to show to one of your representatives such an installation at its factory here in Boston.

Thank you very much for your kind consideration.

Sincerely yours,

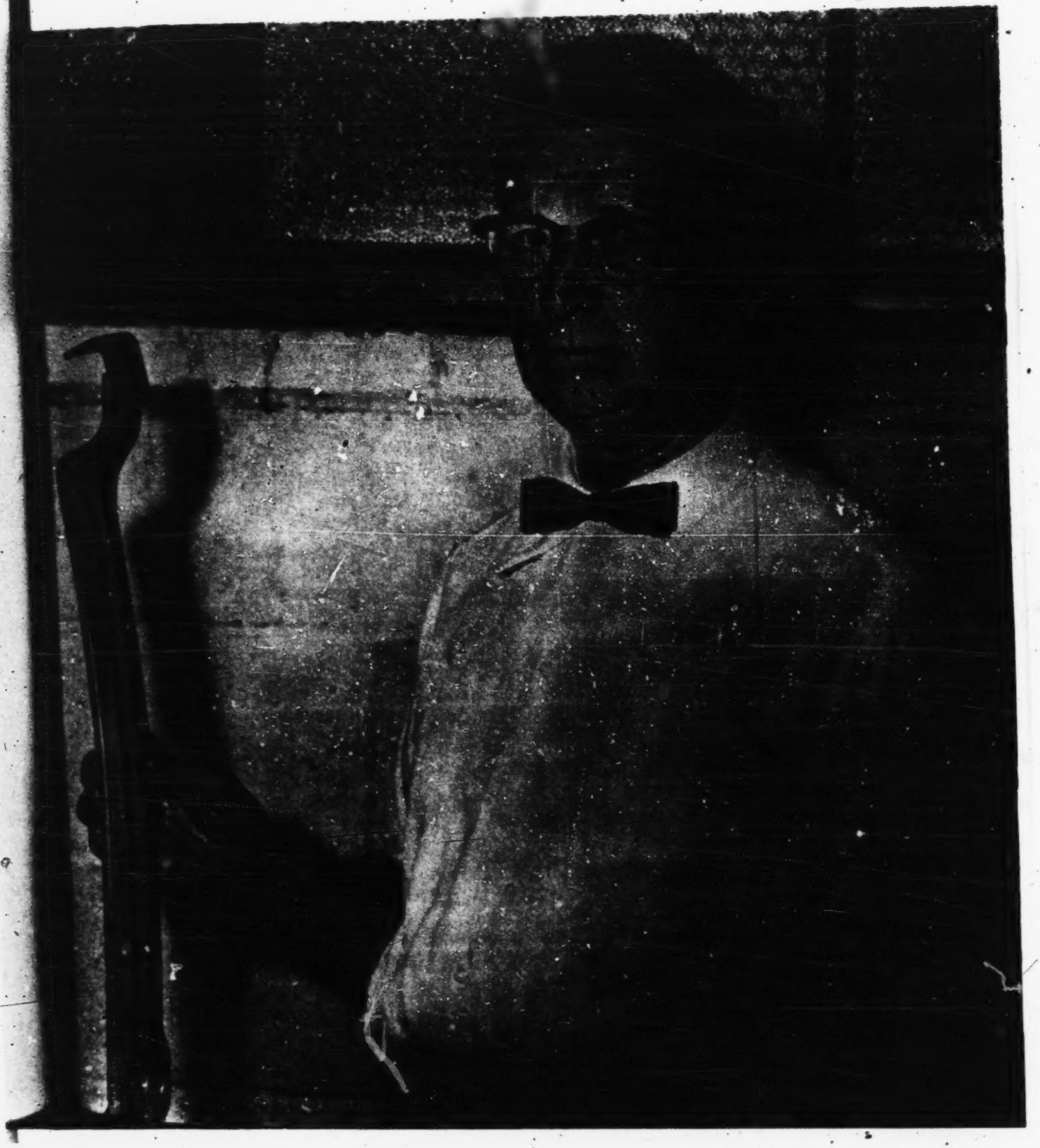
(s) EZEKIEL WOLF

DW/r



PL. Ex. 4

PLAINTIFF'S EXHIBIT NO. 18



ALL TOPS COMPLETE WITH FABRIC CURTAIN — PLASTIC CURTAIN ADDITIONAL
ARO Convertible Tops are Available for

TRIMS FABRIC BY
HAARTZ
Exclusively!
No finer fabric than HAARTZ
No finer top than ARC
all cars from 1928 Year to Current Models

PLAINTIFF'S EXHIBIT NO. 19

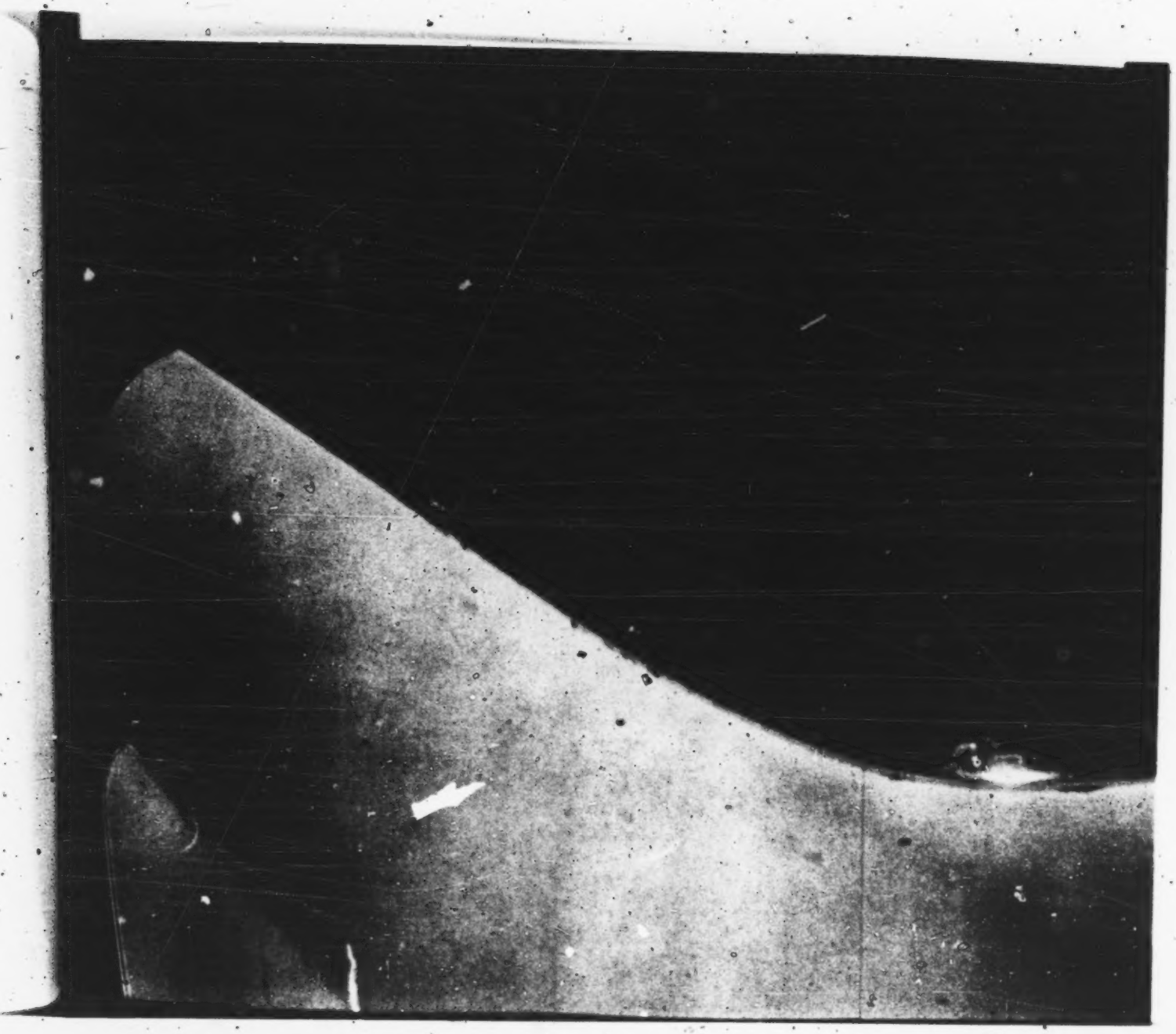
PLAINTIFF'S EXHIBIT NO. 20
184

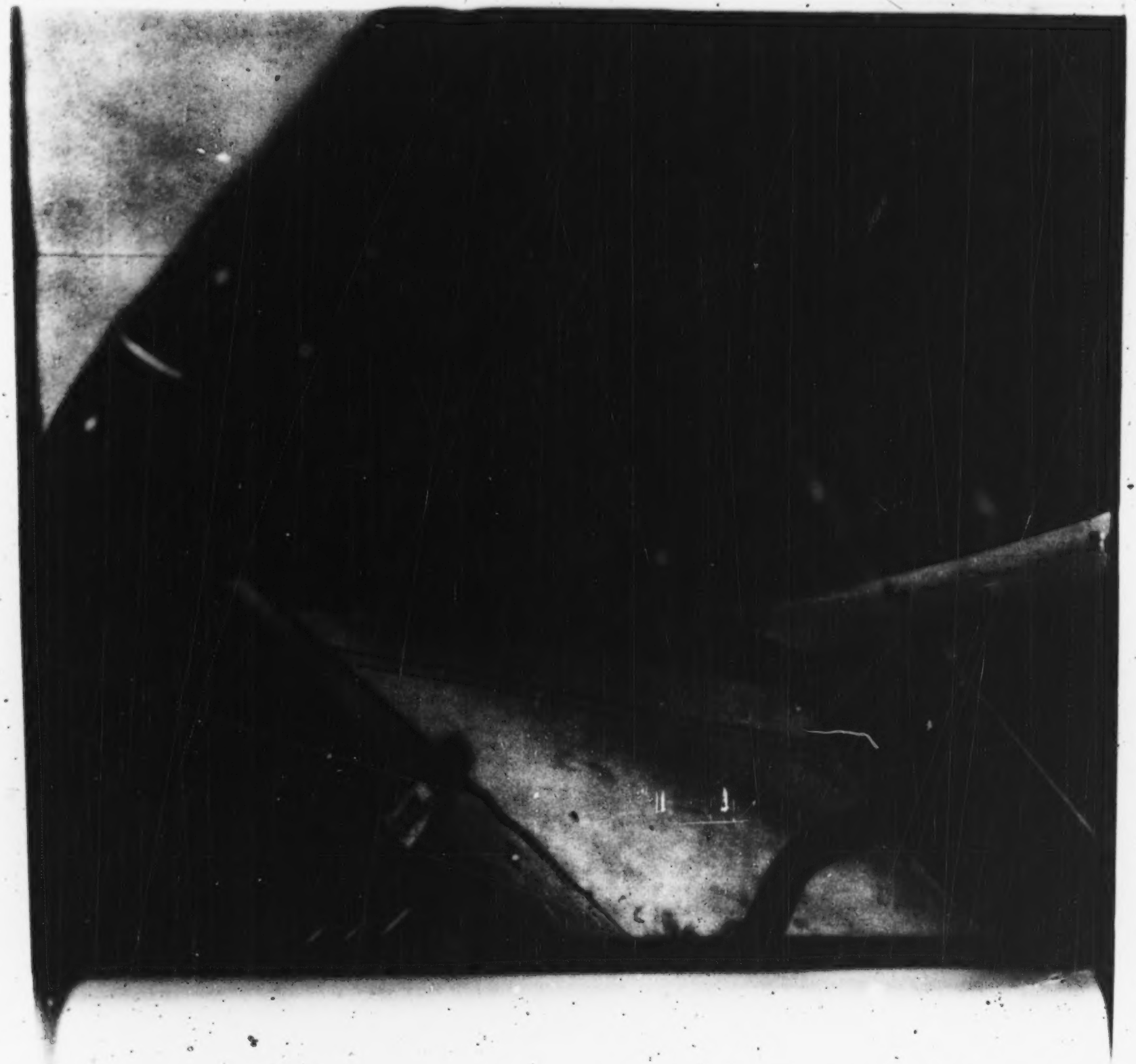
PLAINTIFF'S EXHIBIT NO. 21

PLAINTIFF'S EXHIBIT NO. 22

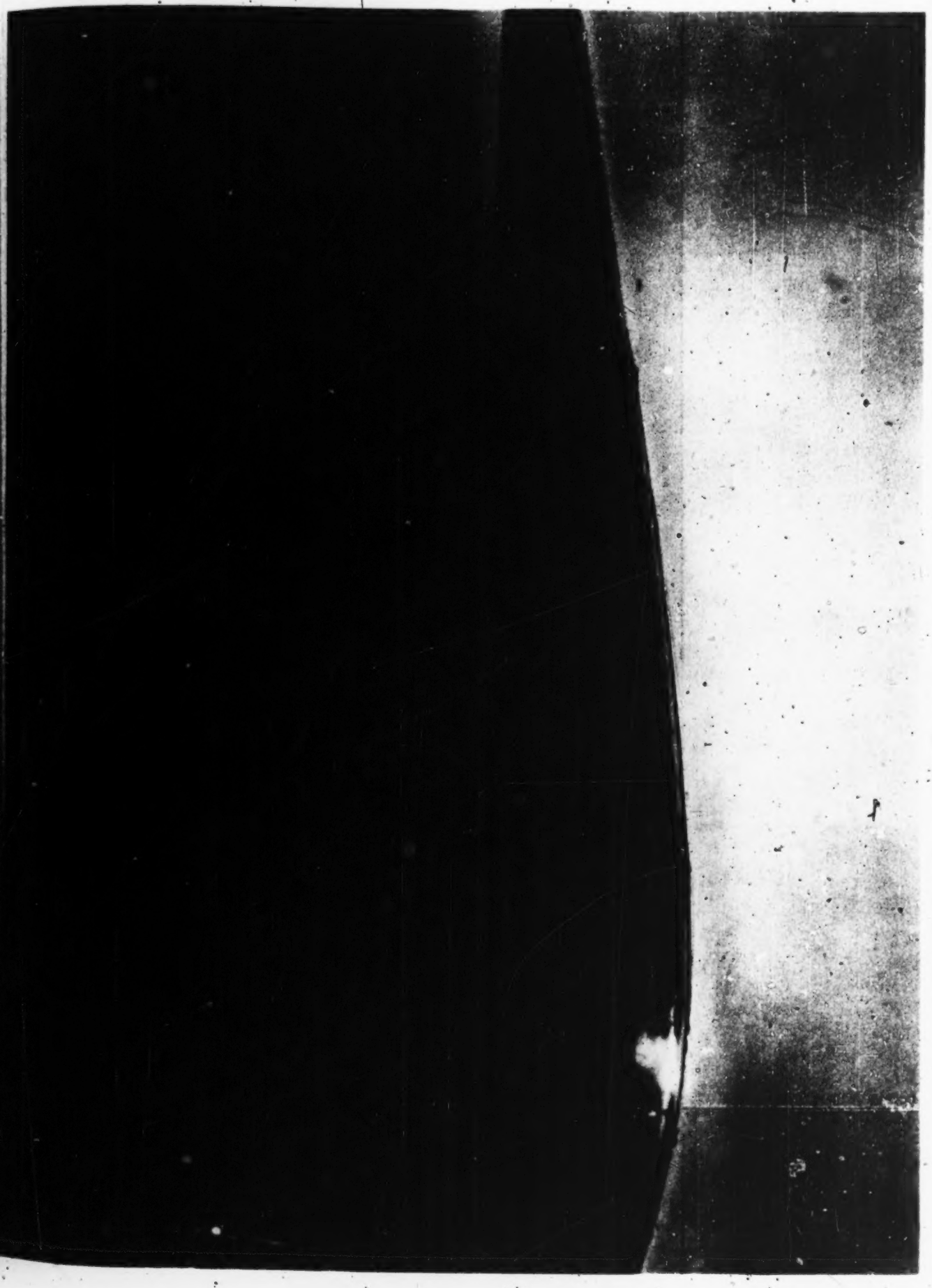
PLAINTIFF'S EXHIBIT NO. 24

PLAINTIFF'S EXHIBIT NO. 25

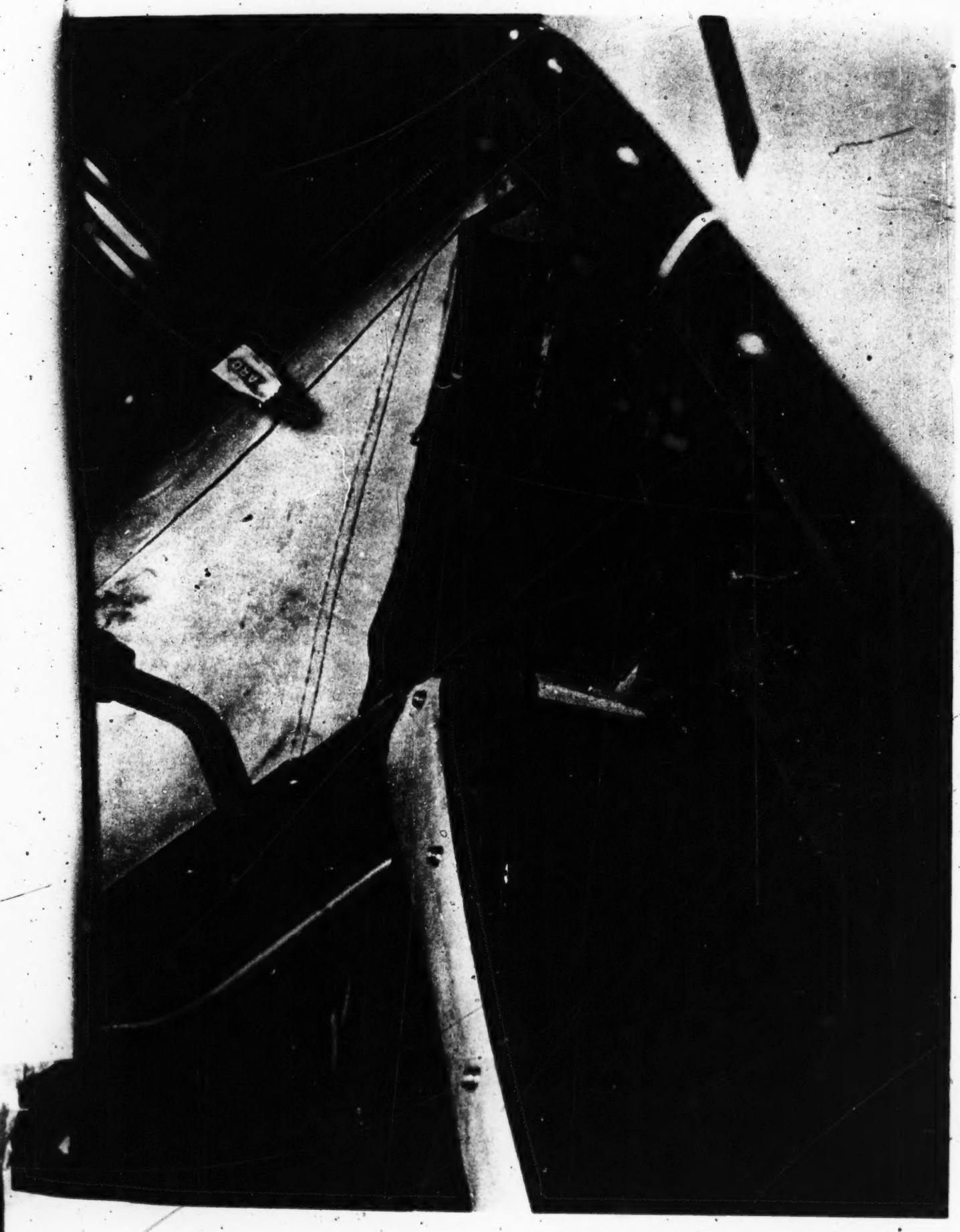




DEFENDANTS' EXHIBIT H



DEFENDANTS' EXHIBIT I



DEFENDANTS' EXHIBIT C'
ASSIGNMENT OF PATENT

Whereas, General Motors Corporation of Detroit, Michigan, a corporation of Delaware, is the owner of the entire right, title and interest in and to United States Letters Patent No. 2,569,724, entitled Convertible Folding Top with Automatic Seal At Rear Quarter, issued in the names of Harry A. Mackie and Stanley Duluk on October 2, 1951.

And Whereas, Automobile Body Research Corp. of Ruxton, Maryland, a corporation of Maryland, is desirous of acquiring an interest in the same.

Now, Therefore, in consideration of One Dollar ($1.00) and other good and valuable consideration paid by said Automobile Body Research Corp. to said General Motors Corporation, receipt of which is hereby acknowledged, General Motors Corporation reserving unto itself, its subsidiaries, foreign and domestic, present and future, and its and their successor or successors, a royalty-free, paid-up, non-exclusive and non-transferable license to make, have made for it or them, use and sell devices embodying the invention of said patent to the full end of the term thereof, hereby sells, assigns and transfers unto said Automobile Body Research Corp. the entire right, title and interest in and to said Letters Patent for the full term (and any extensions thereof) of said Letters Patent; the same to be held and enjoyed by the said Automobile Body Research Corp. as fully and entirely as the same would have been held by General Motors Corporation had this assignment or sale not been made.

In Testimony Whereof, General Motors Corporation has caused this assignment to be executed, sealed and delivered this 30th day of December, 1953.

GENERAL MOTORS CORPORATION
By (s) CHARLES A. CHAYNE
Vice President

Attest:
J. C. DAVIDSON

DEFENDANTS' EXHIBIT DD

Exhibi. No. 25

AGREEMENT

This agreement made this 21st day of July 1955, by and between Automobile Body Research Corp. (hereinafter referred to as AB) of Baltimore, Maryland, a corporation of Maryland; and Ford Motor Company (hereinafter referred to as Ford) of Dearborn, Michigan, a corporation of Delaware.

WHEREAS, AB is the owner of United States Letters Patent 2,549,153, together with all rights to recover for past infringement thereof, this ownership arising by virtue of an assignment to AB from John W. J. Ackermans, which assignment is recorded in the United States Patent Office at Liber Z235 Page 213, and by virtue of an "Agreement" dated December 1, 1953, a photostatic copy of which is attached hereto;

WHEREAS, AB is the owner of the entire right, title and interest in United States Letters Patent 2,569,724 to Mackie and Duluk, together with all rights for past infringement thereof which have accrued since December 30, 1953, by virtue of an assignment from General Motors Corporation to AB which has been recorded in the United States Patent Office on March 8, 1955. Reel 023, Frame 378;

WHEREAS, AB has charged Ford with infringement of said two patents and the parties desire to settle this charge of infringement;

WHEREAS, Ford desires a license to enable it to sell replacement top fabrics under the aforesaid patents,

NOW, THEREFORE, the parties hereto agree as follows:

1. AB hereby releases Ford, its associated companies, domestic and foreign, present and future, its and their successor or successors, its and their dealers, customers and users of its and their products, of all claims that AB has or may have against it or them for infringement

of said patents arising out of the manufacture, use or sale of devices disclosed therein and manufactured before December 31, 1955, other than the "replacement top fabrics" licensed under paragraph 3.

2. Ford hereby agrees to pay AB the total sum of Seventy-three Thousand Dollars ($73,000.00) for the release set forth in paragraph 1, payable as follows: The sum of Thirty-five Thousand Dollars ($35,000.00) is to be paid within fifteen (15) days following the execution of this agreement, and the sum of Six Thousand Three Hundred Thirty-three Dollars and Thirty-three Cents ($6,333.33) to be paid on or before February 15th of each of the six (6) calendar years 1956 through 1961, both inclusive.

3. AB licenses Ford, its associated companies, domestic and foreign, present and future, its and their successor or successors, under said patents, to make or have made for them in the United States and to use or sell throughout the world replacement top fabrics herein called "replacement top fabrics." A "replacement top fabric" as used in this agreement includes only those replacement fabrics which, if sold without the patent owner's consent, would constitute contributory infringement of one or more of said two patents, under 35 United States Code, § 271 (1952). Ford agrees to pay AB a royalty of five per cent (5%) of the dealer net price less any discounts of any and all "replacement top fabrics" hereafter sold by Ford and to make a report to AB by February 15th of each calendar year showing the Ford part numbers of such replacement top fabrics sold by Ford during the preceding calendar year, the dealer net prices less any discounts at which said top fabrics were sold, the number sold at each price, and the royalties due thereon. Ford will accompany the report with a check for the royalties due at the end of the preceding calendar year. If the

Court of Appeals for the Fourth Circuit or the United States Supreme Court holds invalid any of the claims of said Ackermans patent or of any claims of any reissue or extension thereof, or if any court holds any of the claims of said Mackie-Duluk patent invalid, then Ford's obligation to pay royalties under any such invalid claims shall cease as soon as the holding becomes final in the sense that no further appeal or review is possible; provided, however, that if the holding applies only to certain claims of the patent, Ford is not thereby released from payment of royalties on account of its continued operation under a substantially different claim which was not held invalid. The license granted in this paragraph and the obligation to pay royalties provided for herein shall start with the execution of this agreement and continue for the lives of the patents involved. By accepting this license Ford does not admit the validity of the claims of these patents except to the extent of the license granted.

4. Ford agrees to place adequate patent marking of Ackermans patent No. 2,549,153 on those replacement tops licensed under this agreement and manufactured after the date hereof.

5. AB reserves the right to license under said Ackermans patent No. 2,549,153 and said Mackie-Duluk patent No. 2,569,724 the manufacture, use and sale of replacement top fabrics other than those supplied to, made by or sold by Ford, its associated companies, domestic and foreign, present and future, its and their successor or successors, to the extent that AB is entitled to reserve such right under 35 United States Code, § 271 (1952).

6. This agreement is not assignable by either party hereto except as provided hereinabove.

7. The following shall be considered the post office addresses for communications between the parties, but each

party reserves the right to notify the other of a change of address.

Automobile Body Research Corp.
806 Mercantile Trust Building
Baltimore 2, Maryland
Office of the General Counsel
Ford Motor Company
3000 Schaefer Road
Dearborn, Michigan

In testimony whereof the parties hereto have signed and sealed this agreement on the dates set forth below.

July 18, 1955

FORD MOTOR COMPANY
———Signature illegible
Vice President

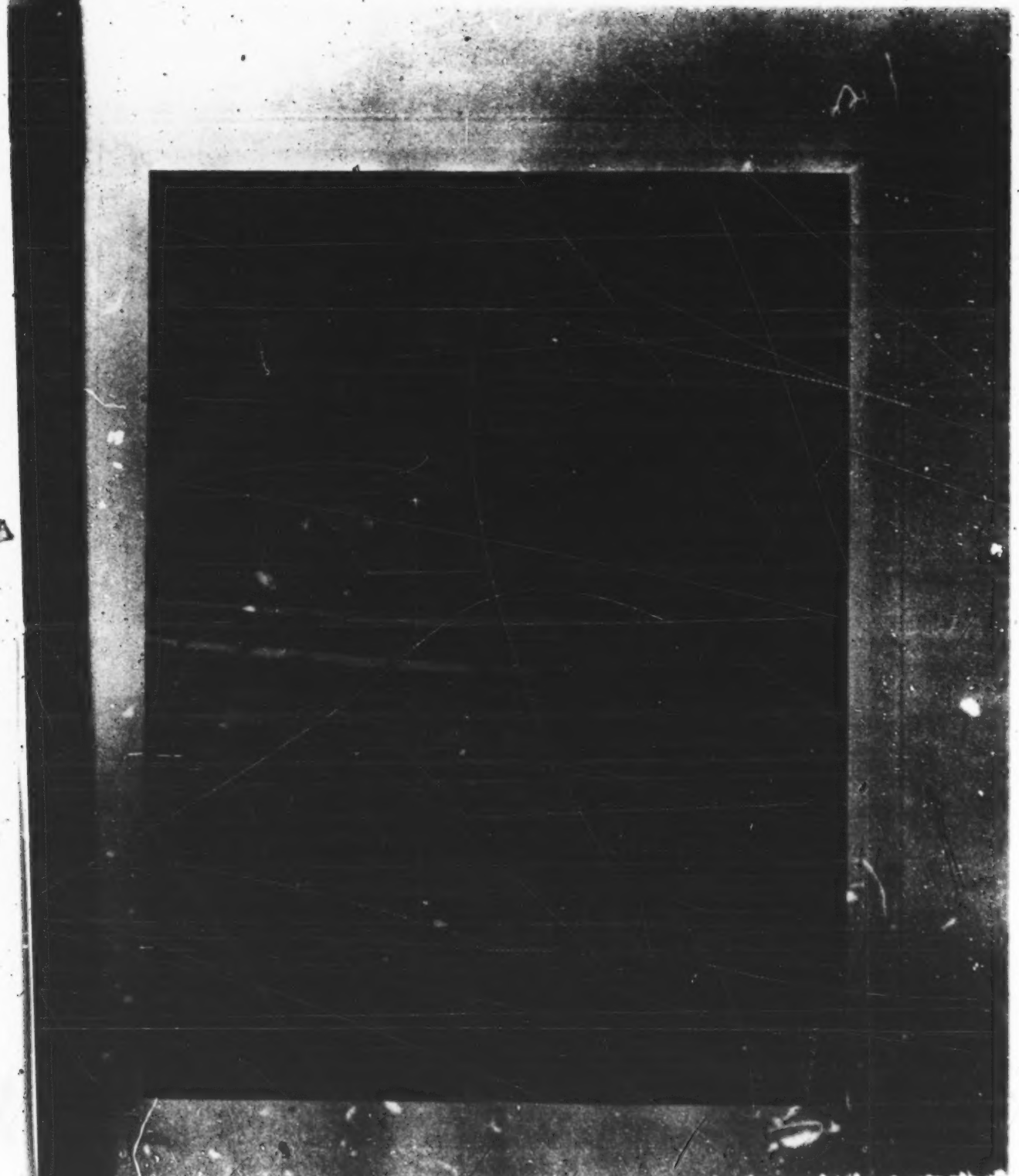
[SEAL]
Attest:
(s) C. J. TELLRATH
Secretary

July 21, 1955

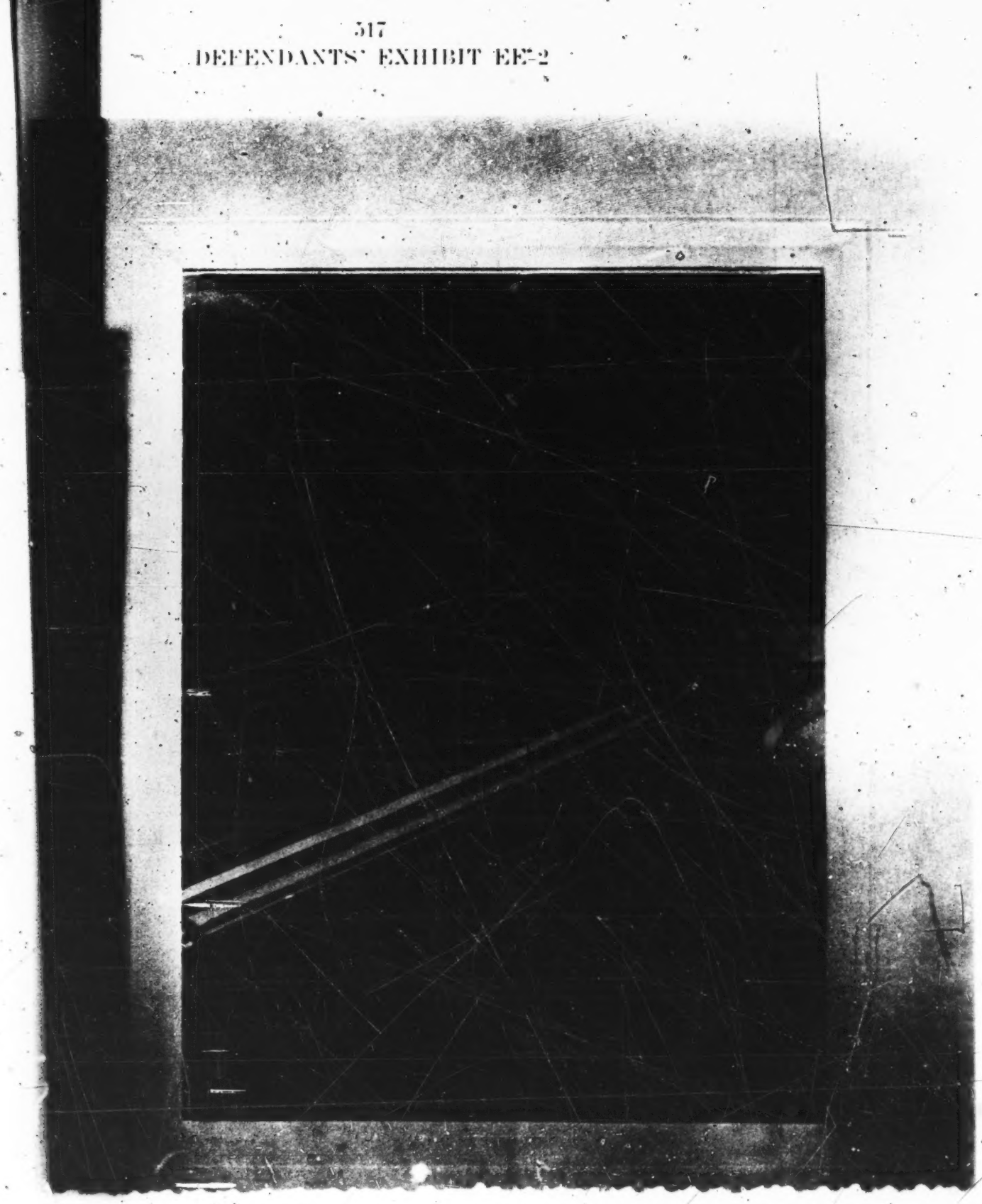
AUTOMOBILE BODY RESEARCH CORP.
By: (s) JOHN L. WHARTON
President

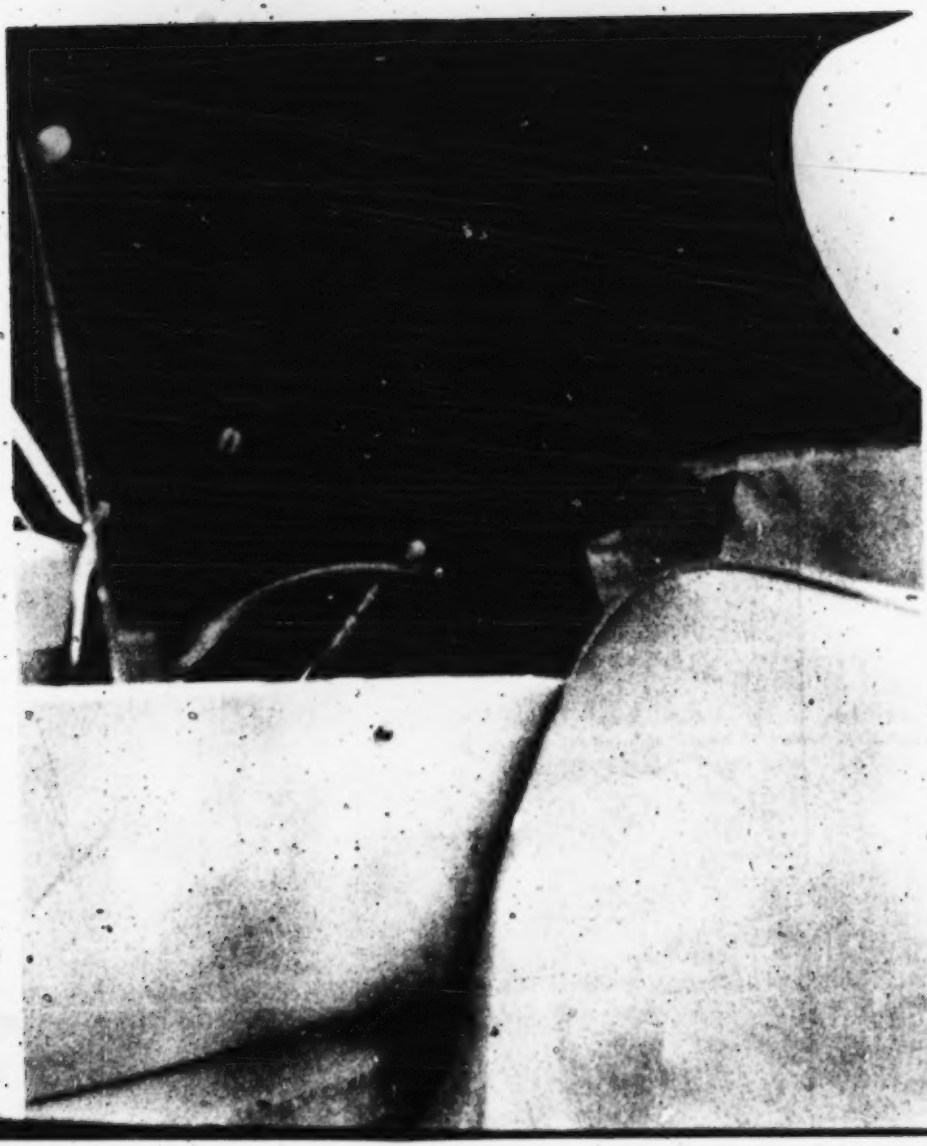
[SEAL]
Attest:
(s) WILLIAM B. KINTER
Secretary

DEFENDANTS' EXHIBIT EE-1



DEFENDANTS' EXHIBIT EE-2





539

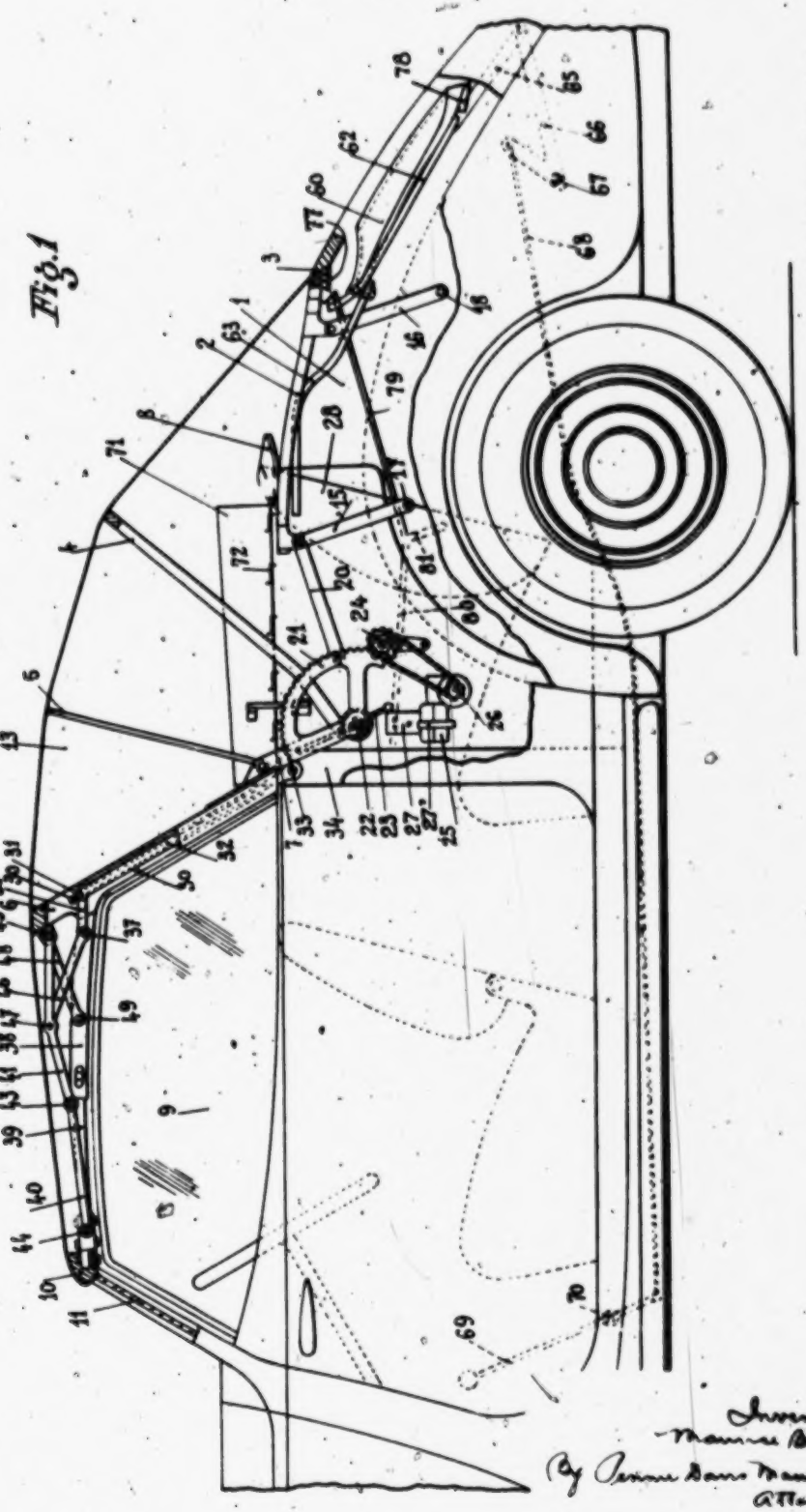
DEFENDANTS' EXHIBIT GG

Jan. 2, 1940. M. BESSONNEAU 2,185,581

DISAPPEARING HOOD FOR MOTOR VEHICLES

Filed Oct. 26, 1935 3 Sheets-Sheet 1

Fig. 1



Inventor
Maurice Bessonneau
By Pennie Davis Marvin & Edmonds
Attorneys

Jan. 2, 1940. M. BESSONNEAU 2,185,581

DISAPPEARING HOOD FOR MOTOR VEHICLES

Filed Oct. 26, 1935 3 Sheets-Sheet 2

Fig. 2

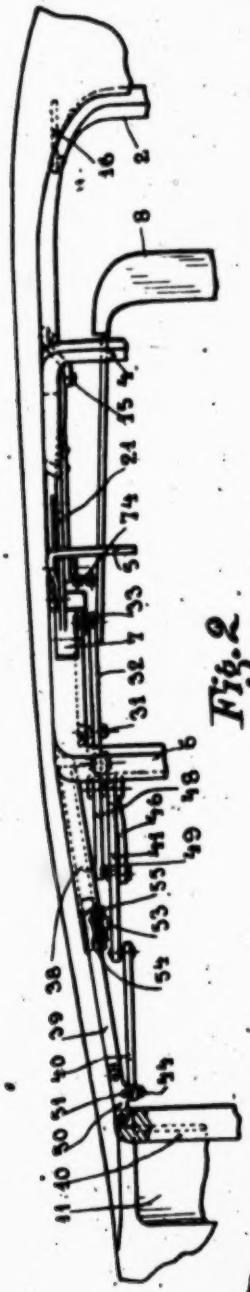


Fig. 7

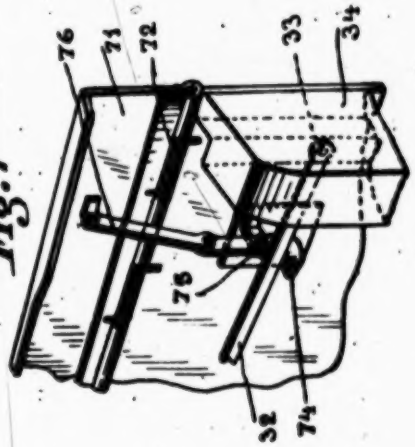
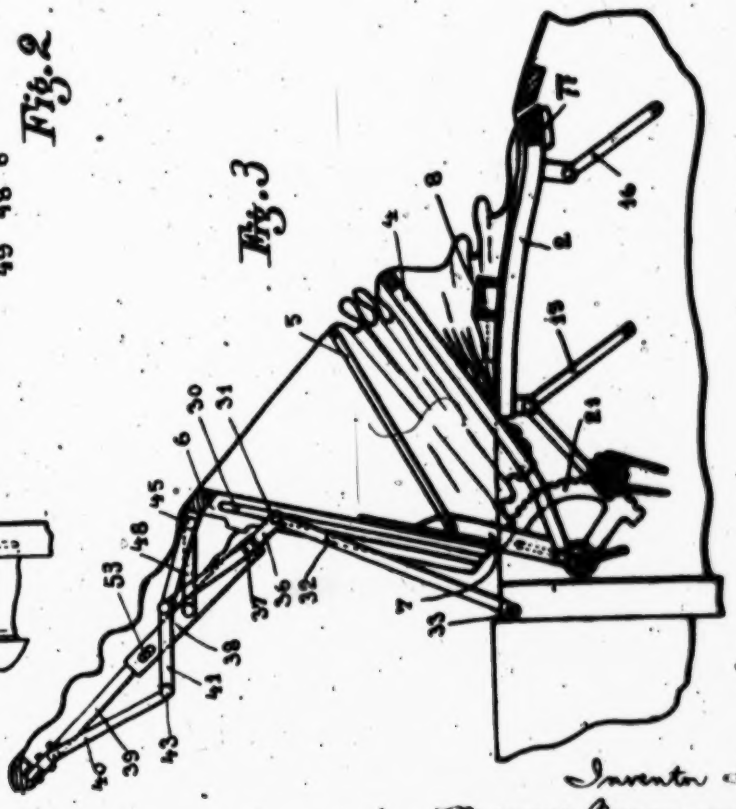


Fig. 3



Inventor
Maurice Bessonneau
By Pennie Davis Marvin & Edmonds
Attorneys

Jan. 2, 1940. M. BESSONNEAU 2,185,581

DISAPPEARING HOOD FOR MOTOR VEHICLES

Filed Oct. 26, 1935 3 Sheets-Sheet 3

Fig. 4

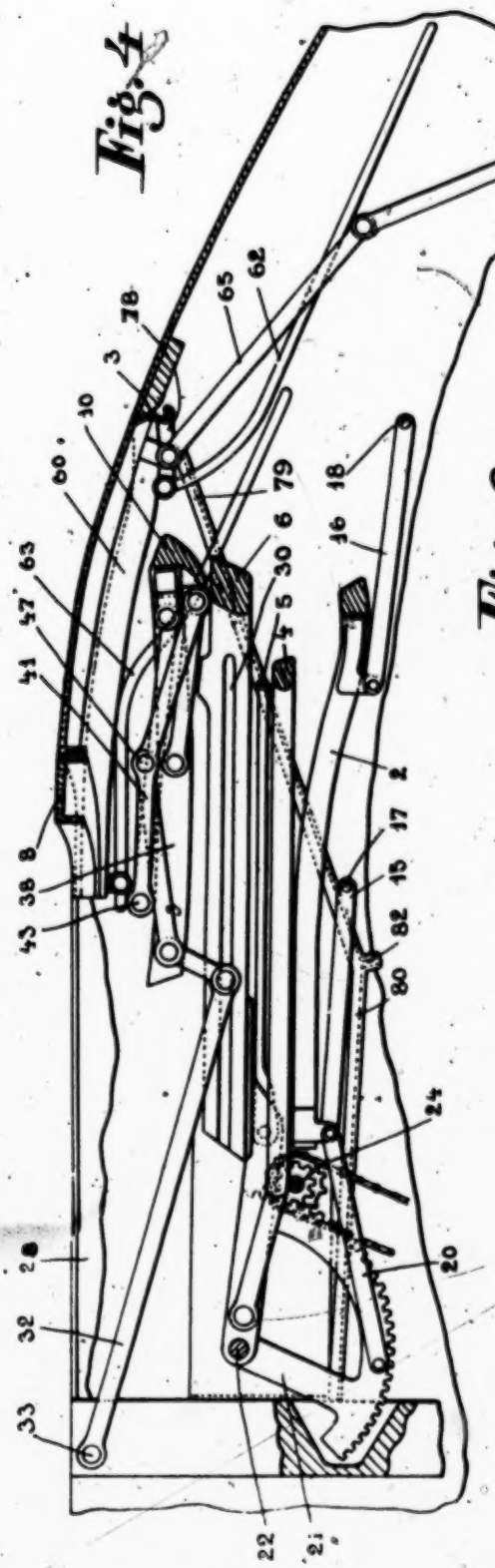


Fig. 6

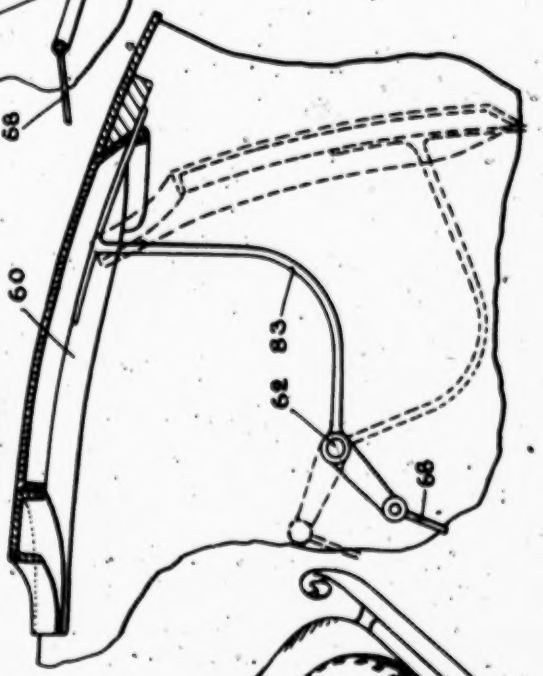
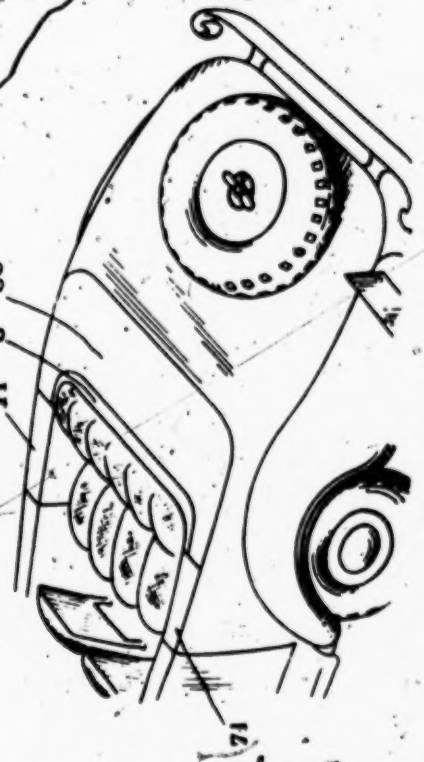


Fig. 5



Inventor
Maurice Bessonneau
By Pennie, Davis, Marvin & Edmonds
Attorneys

anism which is situated on one side of the vehicle, it being understood that the mechanism situated on the other side is symmetrical.

The hoop 2 is mounted so that it will remain practically horizontal as it forms one side of a parallelogram whose other two sides consist of the links 15 and 16 which are pivotally mounted on horizontal axles 17 and 18, located practically in the same horizontal plane. The said hoop is connected by a link 20 to a sector 21 rotatable about an axle 22, and it participates in the rotation of said sector.

The sector 21 is subjected to the action of a spiral spring 23 which tends to turn it in the direction of the opening of the vehicle body top, and its outer perimeter is in gear engagement with a pinion 24 which is rotated by an electric motor 25 through the medium of reduction gear combined with a friction coupling 26 which limits the torque.

The whole of this mechanism is mounted on a metal plate 28 and may be assembled before the carriage body is constructed, and may be delivered separately, the motor 25 being secured to a member 27 supporting said plate by a collar 27'.

A slot 30 located practically according to a straight line passing through the axis of the axle 22 is provided in the hoop 6 and serves as a guide for an axle 31 to which is pivoted a link 32, this latter being pivoted to an axle 33 which is different from the shaft 22, and is mounted for instance on the upright 34 of the carriage body.

A small link 36, which participates in the rotation of the said link 32, is pivoted on an axle 37 mounted on a tubular member 38, in which a bar 39 is slidable. The telescoping movement of bar 39 is controlled by two links 40 and 41 which are pivoted together at 43; one link, 40, is pivoted on an axle 44 mounted on the end of the bar 39; the other link, 41, is pivoted on an axle 45 mounted on the hoop 6. A rod 46 is pivoted at an intermediate point 47 of the link 41 and upon the axle 37; a second rod 48 is pivoted at 49 and also at a point 49 of tubular member 38.

As shown in Fig. 2, the tip 10 is mounted on the bar 39 by means of a double-pivoted member 50, to which is pivoted the rod 49. This latter pivoting can be effected for instance by means of two brackets engaged one within the other and pivoted on a common vertical axle 51, one bracket being pivoted with a socket 44 on which is pivotally mounted the rod 40, held by a nut. On the other hand, a stop is provided on the tube 38 in order to limit the outward move-

telescoping bar 39 is controlled by a link 40, by means of the sliding of the pivot axle 31 in the groove 30, effected by the movement of rotation of the hoop 6.

When opening out the hood device, the link 40 will continue to move forward after stopping of bar 39 by the abutment 55 and the member 50 will be pivoted outwardly, and hence the tip 10 will be brought forward into its definite position. In this manner, the hood will correspond exactly to the trapezoidal form of the vehicle, and the tip will offer no resistance to the inward and outward movements of the telescoping bar 39.

In order to obtain synchronism for the movements on the respective sides of the hood, the motors 25 (one being mounted on each side) are preferably motors of the series type; these are connected in series and are controlled by a reversing switch mounted on the front board. The proper adjustment of the devices 26 for limiting the torque will permit to obtain the movements of the hood without any risk of jamming.

The construction comprises, in order to close the box part 1 between edges 3 and 8 into which the hood is made to disappear, a movable flap or cover 60 corresponding to the form of the carriage body, as shown in Fig. 5. Its ends are movable upon rods which form guides, 62 and 63 (Fig. 1). The said flap is controlled by a link and a V-shaped lever 66, pivoted at 67 to the carriage body. One branch of said lever is connected by a rod 68 to a controlling lever 69 which is pivoted at 70 to the driver's place.

By means of this lever, the driver, before he operates the hood or after the disappearing of said hood, brings the cover 60 from the open position as represented into the closed position (Figs. 4 and 5) and inversely.

On the other hand, the construction comprises, in order to close the lateral openings through which the arrangement of links and uprights for the hoops is caused to disappear, suitable metallic flaps 71 pivoted on hinges provided with torsion springs tending to maintain the said flaps constantly in the raised position (Figs. 1 and 7).

When the hood is to be folded, the whole device is so arranged that the link 32 engages a hook 74 pivoted at 75 and connected by a rod 76 to the flap 71, so that the said flap will be brought down, thus taking the position shown in Fig. 5. It is thus given to the vehicle the perfect outline of a torpedo.

Inversely, when the hood is to be unfolded, the link 32 which is the first to be raised will release the hook 74 and the flap 71 will open by the ac-

Patented Jan. 2, 1940 2,185,581

UNITED STATES PATENT OFFICE

2,185,581

DISAPPEARING HOOD FOR MOTOR VEHICLES

Maurice Bonnemaison, Puteaux, France

Application October 26, 1935, Serial No. 46,845
In France October 27, 1934

10 Claims. (Cl. 296—136)

The present invention relates to a disappearing hood for motor vehicles adapted to travel on land or water, or in air, and it has for its object a hood combined with a carriage body in such manner that it will entirely disappear within the said body, thus transforming an inside driving vehicle into a torpedo having a most approved form.

Another object of the invention consists in the combination of a preferably mechanically controlled hood with a carriage body provided with flaps or the like which completely and automatically cover the opening of the recess in the carriage body adapted to receive the hood when folded down.

Another object of the invention consists in a simple and practical arrangement permitting to effect all the controls required to transform a torpedo into an inside driving car, and inversely, from the driver's seat and without making it necessary to stop the vehicle.

In a preferred form of construction, the framework of hood comprises a tilt hoop to which is secured the rear end of a piece of waterproof canvas and which is located within said recess in the carriage body, said hoop being so arranged as to bear upon the edge of the said recess when in the operative position and to descend into the interior of said recess when the hood is folded down.

The opening of the recess in the carriage body in which the hood is stowed in the folded state is thus quite free and the said carriage body preferably comprises one or more panels, pivoting or slidable, which has been moved aside when the hood was opened out, and which now serve to close the said opening automatically or not—such opening being no longer apparent—without risk of damaging the canvas when the hood is folded down.

The above mentioned hoop is preferably arranged in such manner that it will move in the interior of the said recess while remaining parallel to itself, in order to facilitate the folding of the canvas.

[illegible]

is pushed in concurrently with the pivoting of said support due to the sliding in a guide secured to the said support of a portion of a rod which is pivoted to the carriage work on a different axis from that of the said shaft.

The whole device is so arranged that it is adapted for use with all the known types of carriage body which become narrow towards the front of the vehicle, and it may be operated for instance by a single electric motor or by a motor mounted on each side of the vehicle.

Further objects, features and advantages will be set forth in the following description with reference to the annexed drawings which are given solely by way of example and in which:

Fig. 1 is an elevational view, with parts broken away, of a carriage body of a motor vehicle provided with a hood in conformity with the invention.

Fig. 2 is a corresponding plan view with the waterproof canvas removed.

Fig. 3 is a partial view analogous to Fig. 1 showing the hood in an intermediate position during the folding operation.

Fig. 4 is a partial view analogous to Fig. 1 showing the hood entirely folded.

Fig. 5 is a perspective view of a carriage body with the hood in the folded position.

Fig. 6 is a partial view analogous to Fig. 4 of a modification.

Fig. 7 is a detail view on a larger scale, the outside wall of the body being removed.

In the form of construction shown in Figs. 1 to 5, a recess 1 whose outlet orifice on the top part of the carriage body has a U shape is formed at the rear of the body of a motor vehicle, and the two branches of this U extending along the two lateral edges of the said body.

The framework of the hood comprises a first tilt hoop 2 which, in the operative position (Fig. 1), bears upon the rear edge 3 of the recess 1 with which it makes a joint, and also three other divergent hoops 4, 5 and 6, whereof the first two, 4 and 5, are pivoted to the lower end 7 of the last hoop 6.

While I have described what I at present consider preferred embodiments of my invention, it will be obvious to those skilled in the art that various changes and modifications may be made without departing from my invention and I, therefore, aim in the appended claims to cover all such changes and modifications as fall within the true spirit and scope of my invention.

What I claim is:

1. A device for covering a recess provided at the rear end of the body of a vehicle and adapted to contain a folded hood, said recess having a substantially U shaped opening, said device including a transverse panel, means for mounting said panel for movement to occupy a working position in which it covers the part of said opening corresponding substantially to the middle part of said U, and a rest position in which said part is discovered, at least two rigid flaps, means for mounting said flaps for pivotal movement substantially about edges of said opening corresponding to the respective branches of said U to occupy a position covering the parts of said recess corresponding substantially to the branches of said U and a second position in which said flaps are disposed substantially vertically, and operating means for said flaps.

2. A device as claimed in claim 1 in which said operating means are controlled by said hood.

3. A device as claimed in claim 1 wherein said hood includes at least one lever on each side pivoted within said recess, a projecting piece, connected to each of said flaps and adapted to come into contact with said lever at the end of the folding motion of the hood, thus closing said flap, resilient means designed to return said flap to its second position when said piece is released.

4. A device for covering a recess provided at the rear end of the body of a vehicle and adapted to contain a folded hood, including on each side a support pivoted to said body within said recess and a member pivoted within said recess at a point spaced from the pivot point of said support, said recess having a substantially U shaped opening, said device including a transverse panel supported within said recess, means for mounting said panel for movement to occupy a working position in which it substantially covers the part of said opening corresponding to the middle portion of said U and a rest position in which said part is discovered, at least one rigid side flap pivoted on each side of said body, a projecting piece connected to each flap and arranged to come into contact with said member adapted to close said flap, and resilient means designed to open said flap.

5. A device as claimed in claim 4 wherein said flaps are pivoted about the inner edge of said opening, whereby they are invisible from the outside of the body when they are in their second position, the hood being unfolded.

6. In a vehicle body the rear part of which is provided with a recess adapted to contain a folded hood, and having a U shaped opening, means for covering said opening including at least two rigid flaps, means mounting each of said flaps for pivotal movement about edges of said opening corresponding to the respective branches of said U to occupy a position covering a part of said recess and a second position in which said part is uncovered, the flaps being in said second position disposed substantially vertically, and operating means for said flaps controlled by said hood.

7. A vehicle body as claimed in claim 6 wherein each of said flaps is hinged to the inner side of said opening.

8. In a vehicle body the rear part of which is provided with a recess having a substantially U shaped opening in the top part of said body, said top part including a curved portion at the rear of said opening, said recess being adapted to contain a folded hood the rear end of the covering piece of which is placed within said recess substantially below said opening when the hood is folded whereby a space is provided within said recess between said curved portion and the folded hood, a transverse panel adapted to cover at least the portion of said opening corresponding to the middle part of said U, the outer surface of said panel being curved to merge in the closed position into the surface of said top portion, means for mounting said transverse panel for movement through said space to occupy a second position in which it is wholly disposed within said recess and below said curved portion.

9. A vehicle body as claimed in claim 8 including a fixed and horizontal pivot axis within said recess, at least one supporting member rigid with said transverse panel and mounted for rotation about said axis to occupy two positions corresponding respectively to the two positions of said panel, the surface of said supporting member directed in the forward direction being of concave form whereby said member is adapted to be displaced between its two positions without interfering with said folded hood.

10. A vehicle body as claimed in claim 8 including guiding means within said recess extending below said opening, below said curved portion and through said space, said panel being slidingly supported by said guiding means between its working and second position.

MAURICE BESSONNEAU.

May 9, 1939. M. BESSONNEAU 2,157,783

FOLDING HOOD FOR AUTOMOBILE VEHICLES OR THE LIKE

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Fig.1

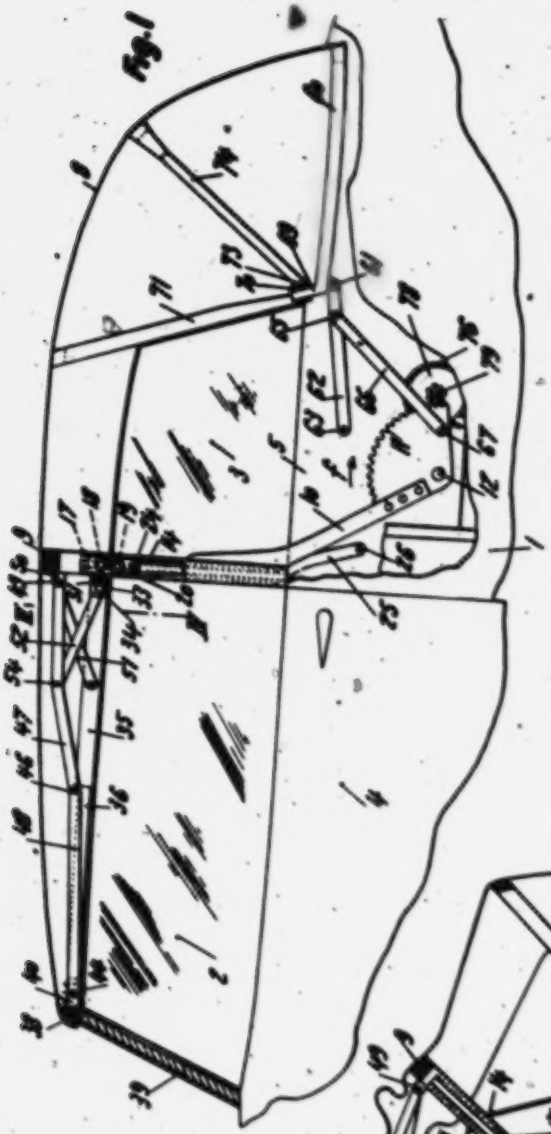


Fig.3

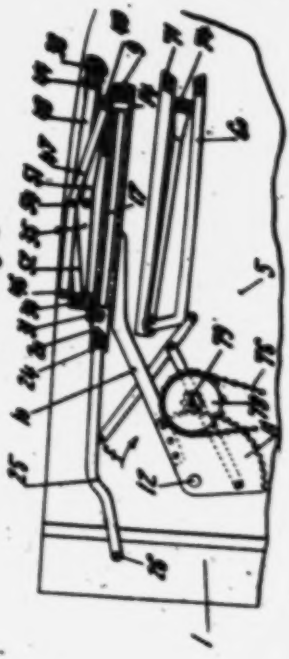
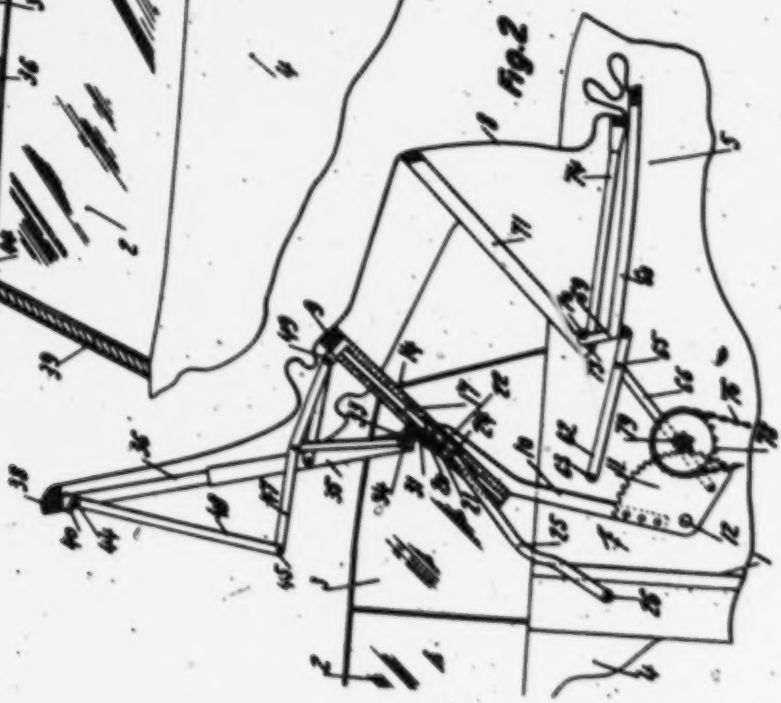


Fig.2



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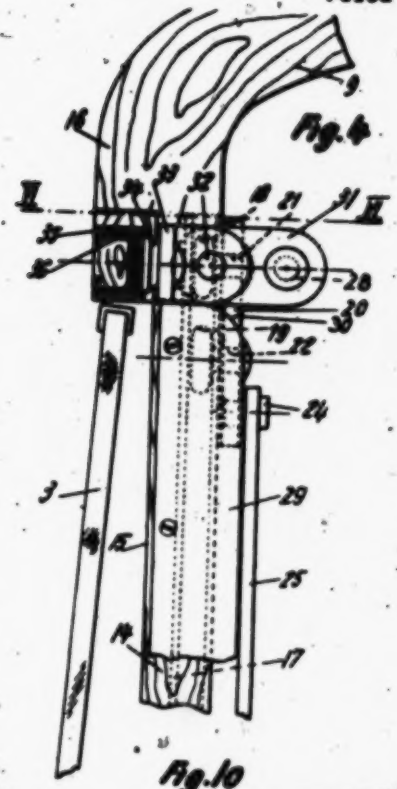
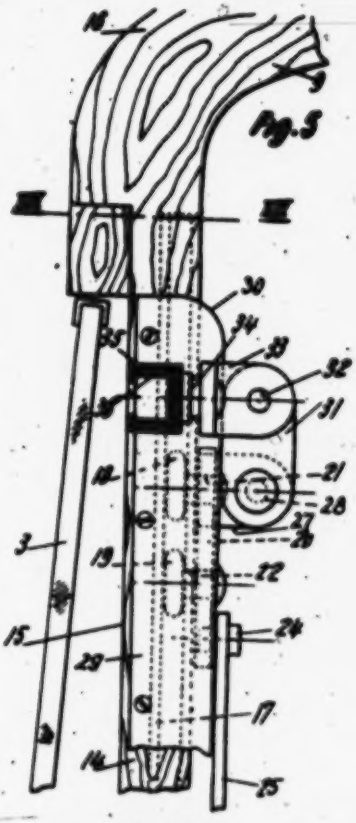
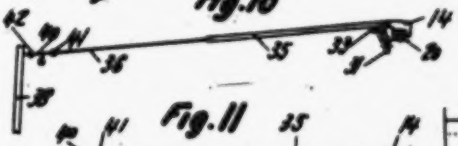
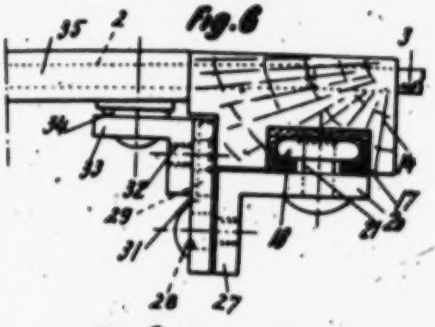
FOLDING HOOD FOR AUTOMOBILE VEHICLES OR THE LIKE

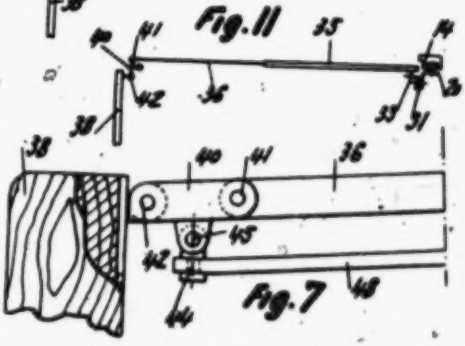
Filed Nov. 16, 1938 3 Sheets-Sheet 2

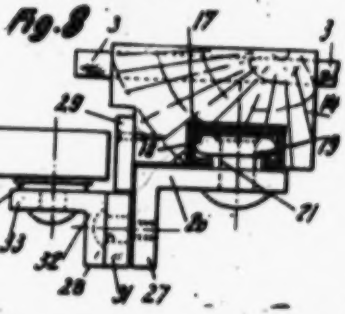


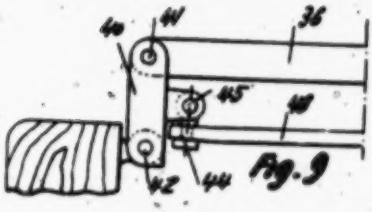












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FOLDING HOOD FOR AUTOMOBILE VEHICLES OR THE LIKE

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Fig. 12

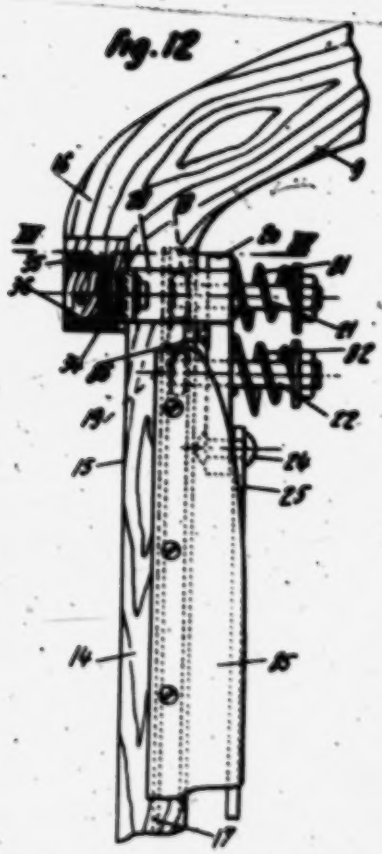


Fig. 13

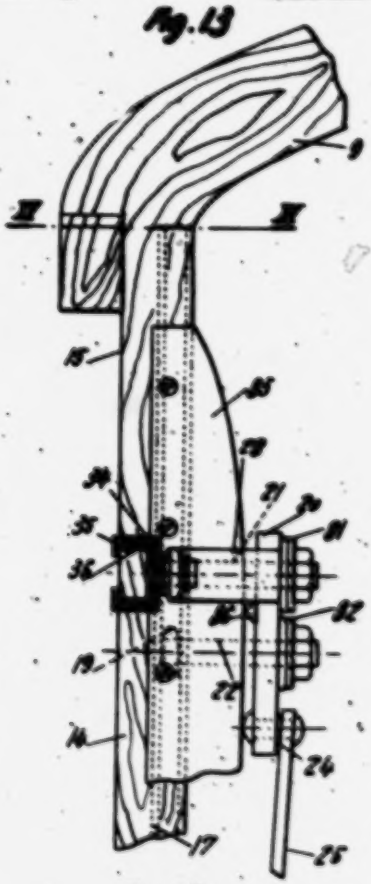


Fig. 14

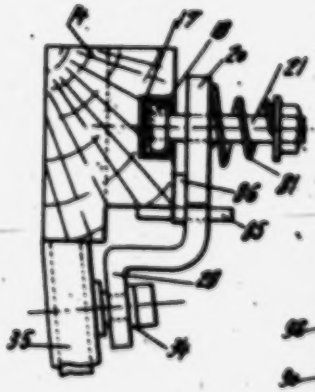
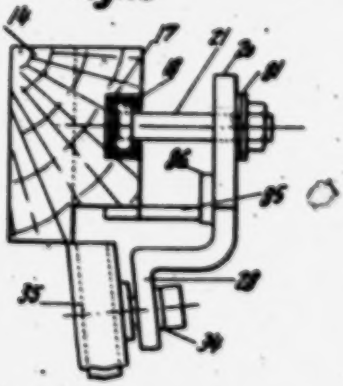


Fig. 16

Fig. 15



Patented May 9, 1939 2,157,783

UNITED STATES PATENT OFFICE

2,157,783

FOLDING HOOD FOR AUTOMOBILE VEHICLES OR THE LIKE

Maurice Boscoumeau, Puteaux, France

Application November 16, 1938, Serial No. 240,846
In France November 20, 1937

14 Claims. (Cl. 296—116)

My invention relates to an automatic folding hood for automobile vehicles or the like and adapted to convert the latter at will into an open car or into a saloon car, and it relates more particularly to the folding hoods of the type described in my co-pending application Serial No. 46,845.

The automatic folding hoods at present in use have no intermediate support between the wind-screen which forms the front end and the front hoop of the rear frame of the hood on the perimeter of which is fixed the cloth or the like. Owing to this fact, the space between said hoop and the wind-screen, and which is occupied by a window, has a limited length so that in general the rear seats of vehicles with hoods only offer their occupants a reduced lateral visibility owing to the fact that it is impossible to arrange windows corresponding to such seats and terminating towards the rear of the car as near the back of the rear seats as would be desirable.

On the other hand, the nevertheless relatively great length of certain vehicles having comfortable rear seats between the said front hoop and the wind-screen would make it necessary to construct a complicated, heavy and cumbersome front frame which would frequently quickly become noisy.

The primary object of my invention is the construction of a hood for an automobile vehicle of which the body is provided with windows, said hood offering a satisfactory visibility from the rear seats and not having the drawbacks referred to above.

The hood according to my invention comprises on the one hand a rear frame formed by hoops and which includes a front supporting hoop hinged on the body, and, on the other hand, a front frame carried by said supporting hoop and essentially formed on either side of the body by a longitudinal bar having telescopic elements position, and on the other hand the front edge of the cloth forming the rear portion of the hood is secured to a hoop hinged at the rear of said supporting hoop.

This arrangement enables mechanically actuated disappearing hoods to be constructed for bodies having four windows each arm of the hoop being substantially located between the two windows in the open position and advantageously arranged entirely on the inside of the body relatively to said windows of which the frames or the like completely conceal it.

According to an important feature of my invention, the longitudinal telescopic bar is carried by the supporting hoop in such a manner that, when in the position of use, said bar is above the windows and substantially in contact with same so that the cloth covering overlaps the windows when it is unfolded as known and is automatically moved towards the inside of the vehicle at the beginning of the folding movement in order to enable said movement to take place when the windows are in the lifted position without said bar coming into contact with same.

This feature is more particularly applicable to hoods in which the said telescopic bar is mounted so that it can pivot about an axis, which is transverse relatively to the vehicle, on a hinge bracket carried by the supporting hoop through the intermediary of a carriage sliding in a guide-way provided in each of its arms, responsive to an appropriate control which is preferably formed by a lever pivoted on the one hand on said carriage, and on the other hand at a point of the body which is different from the hinge point of said hoop, and consequently reference will be made in the specification solely to hoods of this type.

One embodiment of my invention is intended more particularly but not exclusively for hoods for bodies of which the front tapers and for

and of which the length corresponds to the necessary movement of said bar perpendicular to the said axis for said bar to be located entirely inside the vehicle relatively to the rear window.

Preferably, said connecting rod engages a guiding cam fixed on the arm of the supporting hoop, said cam being provided with a curved part adapted to positively control the pivoting motion of said connecting rod at least in the direction of displacement of the telescopic bar towards the inside of the vehicle at the beginning of the downward movement of the aforesaid carriage when folding the hood. The pivoting motion of said connecting rod in the other direction takes place automatically under the action of the linkage of the hood, at the end of the unfolding of the latter, in the case in which said intermediate part carrying the nose-piece is provided, and simultaneously with the pivoting of said part.

Another embodiment of my invention consists in fixing the hinge bracket of the telescopic bar on a plate of the carriage adapted when sliding to be moved perpendicular to the longitudinal axis of the vehicle by means of a cam fixed on the arm of the supporting hoop along the guide-way of said carriage and on which a part of said plate is resiliently pressed.

Numerous other embodiments of the control of the lateral displacement of the telescopic bar can moreover be imagined.

Another important feature of my invention relates to the arrangement of the rear frame of the hood which is adapted to be folded automatically responsive to a mechanical control at the same time as the front frame.

According to an embodiment, the rear hoop of the hood on which the rear end of the cloth is fixed is pivoted on either side on a lever which is pivoted on the body and which is suitably inclined to enable said hoop to penetrate into its housing without substantially moving rearwards, said lever moving under the control of another lever pivoted on the former and on the rotary member on which the front supporting hoop is fixed.

Preferably, in order to decrease the overall length of the folded hood, the fixing hoop of the front end of the cloth of the rear end is pivoted on said rear hoop and advantageously carries at the end of an arm projecting from this pivot point, the pivot pin of an intermediate hoop.

Other features and advantages of the invention will moreover become apparent from the ensuing description taken with reference to the accompanying drawings which is given solely by way of example and in which:

Fig. 1 is a partly broken away side view showing the unfolded hood,

Fig. 8 and Fig. 9 are similar views to Figs. 6 and 7 and correspond to Fig. 5, Fig. 8 being a section along the line VIII—VIII of Fig. 5,

Figs. 10 and 11 are diagrammatical views of the arrangement of the parts corresponding respectively to the groups of Figs. 6 and 7, and 8 and 9 respectively,

Figs. 12 and 13 are similar views to Figs. 4 and 5 and show a modification,

Figs. 14 and 15 are corresponding sections along the lines XIV—XIV and XV—XV of Figs. 12 and 13,

Fig. 16 shows a modification of the main supporting hoop.

Reference will be made hereinafter solely to one side of the body and of the hood, the other side being identical.

Referring to Figs. 1 to 11, a hood has been shown for an automatic vehicle body 1 having on each side a front window 2 carried by a door 4 and a rear window 3 intended to ensure visibility for the occupants of the rear seat (not shown), said hood being adapted to be retracted into a housing 5 of U-shaped cross-section surrounding the rear seat.

The hood which is covered with a waterproof fabric 6 has a main supporting hoop 9 fixed by a swan-necked extension 10 on a part 11 mounted on a pivot 12 inside the housing 5.

Said hoop 9 is composed on either side of the vehicle by an arm or upright 14 which, in the position of use (Fig. 1), is vertical and is located between the two windows 2 and 3. The upright 14 has a recess 15 on its outer face (Fig. 4) so that its upper part 16, which is intended to support the cloth 6, slightly overlaps the outer plane of the windows, the height of said recess 15 being sufficient to enable said hoop to rotate about the pivot 12 when the window is in its raised position.

As shown on a larger scale in Figs. 4 and 6 in the recess 15 of the upright 14, which is assumed to be made of wood is lodged a C-shaped metal guide-way, 17 parallel with said upright and in which rolls a group of two rollers 18 and 19 of which the pivots 21 and 22, having their axes transverse relatively to the vehicle, support a plate or carriage 20. The plate or carriage 20 carries below the rollers 18 and 19 a pivot 24 having its axis parallel with the axes of said rollers. A lever 25 is pivoted on the one hand on said pivot 24 and on the other hand, inside the housing 5, on a pivot 26 carried by the body and at some distance from the pivot 12.

The plate 20 is provided with a shoulder 27 carrying a pivot 28 the axis of which is parallel with the longitudinal axis of the vehicle and on which is pivoted a connecting rod 31 of suitable length.

The connecting rod 31 engages a guiding cam 34

[illegible] 34, to which is pivoted the rod 40. This latter pivoting can be effected for instance by means of two brackets engaged one within the other and pivoted on a common vertical axle 51, one bracket being pivoted with a socket 44 on which is pivotally mounted the rod 40, held by a nut. On the other hand, a stop is provided on the tube 38 in order to limit the outward movement of the bar 39 without acting against the entering movement. The said stop may consist of a spring stud 53 which projects and enters a hole 54 formed in the bar 39. The bottom of said hole is inclined from the entrance towards the bottom 55, in such manner that the said stop will gradually move back during the entering movement of the bar 39 which encounters no obstacle, the outward movement being limited by the abutment 56.

It will be noted that it will suffice to turn the sector 21 from left to right in order to fold up the whole arrangement in a manner resembling what is shown in Fig. 3, and this folding commences by bringing down the rear hoop 4. The canvas is unfolded by the rotation of the sector 21 in the opposite direction, the tension of the canvas being maintained by means of the spring 23.

The inward and outward movement of the hook 74 pivoted at 75 and connected by a rod 76 to the flap 71, so that the said flap will be brought down, thus taking the position shown in Fig. 5. It is thus given to the vehicle the perfect outline of a torpedo.

Inversely, when the hood is to be unfolded, the link 32 which is the first to be raised will release the hook 74 and the flap 71 will open by the action of the springs 73 before the rising framework can make contact with the said flap.

The whole device is completed by a spout or gutter 77 mounted on the edge and parallel to the axis of the wheels of the hoop 3; a spout 78 mounted on the edge of the flap 69; and two spouts 79 and 80 situated along each outer wall of the box part 1, which are adapted to collect the water from the aforesaid spouts and lead to each evacuation conduit 81.

Fig. 6 shows a modification of the flap device 69, and instead of being slidable, it is mounted on a support 82 pivoted on an axle 83. A rod 84 to which a cable 85 is attached is rotatable together with the support 82. It will be observed that the flap 69 will pivot automatically and will assume the position shown in the dotted lines, when the cable 85 is released, and that a tension exercised upon this cable will bring the flap into the closed position.

not—such opening being no longer apparent—without risk of damaging the canvas when the hood is folded down.

The above mentioned hoop is preferably arranged in such manner that it will move in the interior of the said recess while remaining parallel to itself, in order to facilitate the folding of the canvas.

The framework of the hood comprises, in addition to the said hoop which is preferably connected with a driving shaft, at least one support which is mounted on the same shaft and carries the front part of the framework, this being so arranged as to fold down when the said support turns about the said shaft and comes with the said hoop in the interior of the recess.

The front framework consists, to advantage, of at least one longitudinal telescoping bar which

[illegible] along the two lateral edges of the said hood.

The framework of the hood comprises a tilt hoop 2 which, in the operative position (Fig. 1), bears upon the rear edge 3 of the recess 1 with which it makes a joint, and three other divergent hoops 4, 5 and 6, whose the first two, 4 and 5, are pivoted to the hood end 7 of the last hoop 6.

This last hoop 6, whose front part forms an upright support for the lateral glass panels, carries the front framework which ends in a cross piece or tip 10 resting upon the top of the wind-shield 11. The covering consisting of waterproof canvas 13 has its extreme ends secured respectively to the tilt hoop 2 and to the tip 10 and it may also be secured at an intermediate point to the hoop 6.

The following description relates to the me[illegible]

an L-shaped hinge-bracket 33. Said hinge bracket 33 carries on its arm which is perpendicular to the one mounted on the pivot 32 a pivot 34 having its axis transverse relatively to the vehicle and on which is mounted the guide portion 35 of a telescopic bar 35—36. Inside this guide bar 35 is mounted a sliding bar 36 the travel of which is limited by a stop. The front end of the sliding bar 36 carries the nose-piece 38 (or transverse front part of the hood intended to rest on top of the wind-screen 39 and on which is fixed the front end of the cloth 8) through the intermediary of a connecting member 40 (Figs. 7 and 9) which is pivoted by means of suitably spaced vertical pivots 41 and 42 on said bar 36 and on the nose-piece 38 respectively.

The front frame of the hood is completed by the hinged control system which is connected with a tail which is terminated by a pivot 44 and hinged by means of a vertical pivot 45 on an extension of the connecting member 40. Said hinged system comprises a group of two levers 47 and 48 which are pivoted on each other by a pivot 46 at one of their ends and of which the other ends are pivoted respectively about axes which are transverse relatively to the vehicle on the tail 44 and on a pivot 49 carried by a lug 50 fixed to the upright 14.

The hinge system as a whole is completed (Fig. 1) by a lever 51 pivoted on the guide-bar 35 and on the upright 14, for example on the pivot 49, and by a lever 52 pivoted on the pivot 34 and on a pivot 54 fixed at an intermediate point of the lever 47.

The rear frame of the hood comprises a hood 60 on which is fixed the rear end of the cloth 8 and is intended to be pressed, in the position of use, against the outer edge of the housing 5 and to penetrate into said housing when the hood is folded.

Said hoop carries a pivot 61 having its axis transverse relatively to the vehicle and on which is pivoted a lever 62 which is itself pivoted by means of a pivot 63 on the body. At an intermediate point of the lever 62 is arranged a pivot pin 66 of a lever 66 which is itself pivoted at its other end on a pivot 67 carried by the actuating quadrant 11.

The end of each arm of the hoop 60 has an upwardly directed extension 68 which carries the hinge pin 70 of an intermediate hoop 71 on which is fixed the end of the cloth 8 forming the rear portion of the hood. Each arm of the hoop

In other words, the assembly located between the upright 14 and the nose-piece occupies the position shown diagrammatically in plan view in Fig. 10 showing the taper of the body towards the front.

When the member 11 is rotated in the direction of the arrow *f*, Fig. 1, said member 11 drives the hoop 9, and the carriage 28 is moved downwards along the guide-way 17 by the lever 25, as shown in Fig. 2. During the first part of this movement, on the one hand the levers 47 and 48 pivot about the pivots 49 and 46, and exert a push on the tail 44 causing the connecting member 40 to swing and take up its transverse position shown in Fig. 9, and on the other hand the intermediate connecting rod 31 engages the curved part 30 of the cam 29 and takes up its vertical position. Owing to this fact, the front end of the bar 35—36 has moved away from the longitudinal axis of the vehicle and its rear end has moved towards said axis, so that the whole arrangement occupies the position shown in Fig. 11 in plan view, in Fig. 2 in elevation, and in Fig. 5 in section, the bar 35—36 being substantially parallel with the longitudinal axis of the vehicle. The rear part of the bar 35 is then moved towards the inside of the body relatively to the windows and, as the nose-piece 38 is raised above the window 2, the sliding of the plate 20 along the upright 14 at the same time as the swinging of the hoop 9 can take place up to the position shown in Fig. 3 without closing the windows, the connecting rod 3 sliding along the rectilinear part of the cam 29.

At the same time, the lever 66 swings the lever 62 moving the hoop 60, on which the two hoops 71, 74 fold, towards the inside of the housing 5, the latter hoop without projecting rearwardly with respect to the two others owing to its being hinged on the pivot 73 carried by the extension of the arm of the hoop 71. The whole arrangement then occupies a very small space in the housing 5, as shown in Fig. 3, and said housing can moreover be closed by means of flaps.

For unfolding, the quadrant 11 is rotated in the opposite direction to the arrow *f*.

When the upright 14 comes into the vicinity of its vertical position, the sliding bar 36 is at the end of its travel within bar 35 which is limited by a stop and the lever 47 pushes the tail 44 and swings the connecting member 40. The lateral displacement of the telescopic bar 35—36 which then takes place positively causes the intermediate connecting rod 31 to swing about the

14 and of a guide cam 85, similar to the cam 29 described in the above embodiment fixed on the upright 14 and on which the plate is adapted to bear through the intermediary of a projecting part 86 fixed on its surface opposite said cam. The shape of the guide surface of said cam 85 is that of a slope which runs away from the outer surface of the upright 14 by a length equal to the aforesaid transverse displacement and continues up to the lower end of the guide-way 17. The longitudinal bar 35 is mounted directly, through the intermediary of a pivot 34 which is substantially transverse to the vehicle, on an extension 28 of the plate 26.

It will immediately be seen that when the lever 25 moves the plate 26 downwards, said plate moves laterally against the action of the springs 81 and 82 under the influence of the cam 85 up to its position shown in Fig. 13, and at the same time moves the bar 35 towards the inside of the body, so as to enable the folding to be effected without being hindered by the windows. The unfolding is effected in a similar manner.

The remainder of the device is identical with that described with reference to the previous figures.

Finally, in Fig. 16, a modification of the hoop 9 has been shown which, in order to enable folding to be effected without being hindered by the windows, has a slot 88 in the upright 14 for the window 3 to pass and its part 82 is thus outside the windows relatively to the inside of the body when the hood is unfolded.

While I have described what I at present consider preferred embodiments of my invention, it will be obvious to those skilled in the art that various changes and modifications may be made without departing from my invention and I therefore aim in the appended claims to cover all such changes and modifications as fall within the true spirit and scope of my invention.

What I claim is:

1. In the combination of a folding hood with a vehicle body, a body provided on each side with at least one window, a front supporting hoop each arm of which is mounted on a side of said body for rotation between a rest position in which the intermediate part of said hoop is at the rear of the body and a working position in which said arm is at the fore of the rear end of said window and thus forms an intermediate upright, a front frame including on either side of the body a guiding bar and a further bar in line with said guiding bar and in sliding engagement therewith, a linkage between said bars and said supporting hoop for holding said bars and controlling said latter between the horizontal each arm of which is mounted on a side of said body for rotation between a rest position in which the intermediate part of said hoop is at the rear of said body and a working position in which said arm is at the fore of the rear end of said window and thus forms an intermediate upright, a carriage in engagement with each arm of said supporting hoop and adapted to travel along same, a guiding bar on each side of said body, a further bar carried by said guiding bar and in line and in sliding engagement therewith, a linkage between said bars and said supporting hoop adapted to hold and control said bars, connecting means between the rear end of said guiding bar and said carriage adapted to allow displacement of said guiding bar, when the hoop is unfolded, between a working position in which said bars are substantially above said window and a further position inside of the vehicle with reference to said window and enabling the folding movement to take place.

4. A combination of a folding hood with a vehicle body as claimed in claim 3 including controlling means operatively connected to the position of said carriage and adapted to automatically control the displacement of said guiding bar at least in the direction of the interior of the body during the first part of the corresponding folding stroke of the said carriage.

5. In the combination of a folding hood with a vehicle body, a body provided on each side with at least one window, a front supporting hoop each arm of which is mounted on a side of said body for rotation between a rest position in which the intermediate part of said hoop is at the rear of said body and a working position in which said arm is at the fore of the rear end of said window and forms an intermediate upright, a guide way provided in each of said arms, a carriage in engagement with said guide way and adapted to travel along same, a guiding bar on each side of the body, a further bar carried by said guiding bar and in line and in sliding engagement therewith, a linkage between said bars and said supporting hoop adapted to hold and control said bars, carrying means for the rear end of said guiding member, a connecting rod included in said carrying means for connecting said latter to said carriage, said connecting rod being pivoted on said carriage about an axis fore and aft directed with reference to said vehicle and carrying a further pin, parallel with said axis and connected to said rear end, the distance between said last named pin and axis corresponding to the necessary movement of the rear of said guiding bar to be brought from its working position in which said connecting rod is substantially

the hood, at the upper end of the stroke of the carriage.

8. In the combination of a folding hood with a vehicle body of which the front tapers, a body provided on each side with at least one window, a front supporting hoop each arm of which is mounted on a side of said body for rotation between a rest position in which the intermediate part of said hoop is at the rear of said body and a working position in which said arm is at the fore of the rear end of said window and forms an intermediate upright, a guideway provided in each of said arms, a carriage in engagement with said guide way and adapted to travel along same, a guiding bar on each side of the body, a further bar carried by said guiding bar and in line and in sliding engagement therewith, a stop adapted to limit the extension motion of the whole formed by said guiding and further bars, an end connecting nose-piece, a connecting member pivoted both to said piece and said further arm about substantially vertical axes and adapted to be displaced between a position corresponding to the folded hood and in which it is substantially transversal with reference to the body and a second position in which it is alined with said further arm, a pivot pin carried by said connecting member and substantially transversal with reference to the vehicle, at least one further pivot pin substantially parallel with said last named pivot pin and carried by said supporting hoop, a holding and controlling linkage pivoted to said last named pivot pin adapted to control the motions of said further bar, a hinge bracket, the rear end of said guiding bar being mounted on said hinge bracket for pivotal movement about an axis which is transversal with reference to the vehicle, a connecting rod, the two ends of said connecting rod being respectively pivoted on said carriage and on said hinge bracket about fore and aft directed axes with reference to the vehicle, the distance between said last named axes corresponding to the necessary movement of the rear of said guiding bar to be brought from its working position in which said connecting rod is substantially horizontal to a position in which said guiding bar is inside the body with reference to the window and conversely.

9. A combination as claimed in claim 8 including a guiding cam carried by said arm and adapted to engage said connecting rod thus controlling at least the motion of said connecting rod in the direction corresponding to the folding of the hood, at the upper end of the stroke of the carriage.

10. A combination as claimed in claim 3 in which said arm is provided with a guide way, at least two rollers being carried by said carriage and being adapted to carry the latter.

11. In the combination of a folding hood with a vehicle body, a body provided on each side with at least one window, a front supporting hoop each arm of which is mounted on a side of said body for rotation between a rest position in which the intermediate part of said hoop is at the rear of said body and a working position in which said arm is at the fore of the rear end of said window, and forms an intermediate upright, a guide way provided in each of said arms, a carriage in engagement with the guide way and adapted to travel along same, projecting guiding members substantially transverse with reference to the body and rigid with said carriage, a plate member carried by said projecting members for movement along same, a cam member carried by said arm and adapted to be resiliently engaged by said plate and to displace said latter along said projecting members at the end of the unfolding motion of the hood and conversely at the beginning of the folding motion, and a front frame carried by said plate for supporting the forward part of the hood.

12. In the combination of a folding hood with a vehicle body the rear part of which is provided with a recess adapted to contain the folded hood and which is provided on each side with at least one window, a front supporting hoop each arm of which is mounted on a side of said body for rotation about an axis disposed within said recess between a rest position and a working position in which said arm is at the fore of the rear end of said window, a member rigid with the part of said arm disposed within said recess, a connecting rod pivoted within said recess, a further connecting rod pivoted both to said last named connecting rod and to said member, a rear hoop adapted to carry the rear portion of the covering piece and pivoted at the end of said first named connecting rod, thus enabling said hoop to penetrate in said recess without substantially rearward movement.

13. A combination as claimed in claim 12 including projecting parts rigid with the arm of said rear hoop and a further hoop pivoted at the end of said parts and adapted to carry the front end of the rear portion of the covering piece.

14. A combination as claimed in claim 12 including projecting parts rigid with the arm of said rear hoop and a further hoop pivoted at the end of said parts and adapted to carry the front end of the rear portion of the covering piece, a projection rigid with the arms of said further hoop and a still further hoop pivoted at the end of said projection.

MAURICE BERSONNEAU

[redacted] and which includes a front supporting hoop hinged on the body, and, on the other hand, a front frame carried by said supporting hoop and essentially formed on either side of the body by a longitudinal bar having telescopic elements and a linkage between said bar and said hoop controlling the various folding and unfolding movements and is characterised in that, on the one hand, the aforesaid supporting hoop is mounted on either side of the body for pivotal displacement about a pivot carried by the body and is arranged in such a manner that its arm is, when in the position of use, at the fore of the rear end of the window adjacent to the rear seats of the vehicle and thus forms an intermediate upright, the shape of said hoop and the arrangement of the front frame being such that the pivoting of the whole arrangement for folding is not hindered by said window when in its raised [redacted] ence will be made in the specification solely to hoods of this type.

One embodiment of my invention is intended more particularly but not exclusively for hoods for bodies of which the front tapers and for this purpose the nose-piece of the hood is connected to the end of the longitudinal telescopic bar by an intermediate part on which are pivoted about vertical pivots, said bar, said nose-piece and an extension carrying the pivot pin of the lever of the hinged system controlling the unfolding and the folding.

According to this embodiment, the connection between the carriage sliding along the arm of the supporting hoop and the telescopic bar is effected by means of a connecting rod which is pivoted both on said carriage and on the hinge bracket of the telescopic bar about pins which are parallel with the longitudinal axis of the vehicle,

point, the pivot pin of an intermediate hoop.

Other features and advantages of the invention will moreover become apparent from the ensuing description taken with reference to the accompanying drawings which is given solely by way of example and in which:

Fig. 1 is a partly broken away side view showing the unfolded hood,

Fig. 2 is a view corresponding to Fig. 1 and showing the hood in an intermediate position,

Fig. 3 is a view corresponding to Figs. 1 and 2 and showing the hood in its folded position, the waterproof fabric being removed,

Fig. 4 is a section on a larger scale along the line IV—IV of Fig. 1, the hinged system for controlling the folding and unfolding being removed together with the front window,

Fig. 5 is a similar view to Fig. 4 of the whole arrangement during folding shown in Fig. 2,

Fig. 6 is a section along the line VI—VI of Fig. 4,

Fig. 7 is a plan view showing the corresponding position of the front part of the frame of the hood.

housing 8, on a pivot 26 carried by the body and at some distance from the pivot 12.

The plate 28 is provided with a shoulder 27 carrying a pivot 29 the axis of which is parallel with the longitudinal axis of the vehicle and on which is pivoted a connecting rod 31 of suitable length.

The connecting rod 31 engages a guiding cam 28 fixed by screws or the like on the forward face of the arm 14. The guiding edge of the cam 28 comprises a rectilinear part along the arm or upright 14 and parallel with said latter and is terminated slightly below the upper end of the guideway 17 by a curved part 30 guiding the pivoting motion of the connecting rod 31 about the pivot 26 when the plate or carriage 28 is displaced in the vicinity of said upper end, whereby said connecting rod 31 is displaced either from the horizontal position shown on Fig. 4 to the position shown on Fig. 5 in which it is parallel with the arm 14 or from said latter position to the horizontal position.

The connecting rod 31 carries a pivot 32 parallel with the pivot 29 and on which is mounted

Vehicle Hood

I, MAURICE BESSONNEAU, of French nationality, of 8 Bis, Rue Delarivière-Letoulon, Puteaux (Seine), France, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

My invention relates to a new arrangement of hood adapted to be attached to the body of a vehicle and to allow the transformation of an inside driving car having four or more places into a torpedo, or vice versa, this being completely carried out as the said vehicle hood will cover in the first place the entire car and will then be made to disappear completely.

The hood according to my invention comprises the combination of a rear framework pivoted to the body of the vehicle and adapted to fold up fanwise or the like with a front framework including on each side a guiding arm and a further arm in sliding engagement with and aligned with it, the structure formed by said two last named arms being connected, on the one hand, to at least one fixed point of said rear framework, and on the other hand, to a point of said body spaced from the pivot point of said rear framework, in such a way that, when the latter is folded up, this will cause the folding of the front framework and will bring it against the folded rear framework.

According to a preferred embodiment of my invention, the hood comprises on each side a travelling member in sliding engagement with a support included in said rear framework, a lever pivoted to said travelling member and to said point spaced from the pivot point of said rear framework, a guiding arm connected to said travelling member, a point of which arm is bound to turn about a fixed point of said support by means of a link or the like, a further arm in sliding engagement with and aligned with said guiding arm, and connecting levers between said further arm and said support whereby said further arm is adapted to slide relatively to said guiding arm upon rotation of said support.

The accompanying drawings show by way of example a form of construction of the vehicle hood according to my invention.

Fig. 1 is a longitudinal section.

Fig. 2 is a plan view of one side of the framework with the canvas removed.

Fig. 3 is a partial view showing the vehicle hood in the process of folding.

In the form of construction shown in the drawings, the rear framework supporting the canvas *t* comprises three hoops 1, 2 and 3, the third hoop being pivoted to the first at *3a*, and the second to the third at *2a* whilst the first hoop is pivotally mounted, on each side of the vehicle, on an axle 4, and thus the whole device can be folded up fanwise.

A strong spring 5 attached at 6 acts normally to oppose the folding movement, and thus gives the necessary tension to the canvas.

The front part of the hoop 1 of the rear framework includes a support 1*a* which, when the canvas is in use, has a vertical position in register with an upright 7 pertaining to the carriage-body. This part, which is adapted to be used as a door frame, is preferably provided with an angle-piece covered with an indiarubber member 8 serving as an upright of the window frame.

The front framework comprises a hoop 9, a pointed end-piece 10, a guiding arm 13 and a further arm 11 in sliding engagement with and aligned with said guiding arm. In the example shown in which the body becomes narrow towards the front, the said end-piece is connected to the end of the sliding arm 11, by means of a member 10*a* pivoted to said arm and to said piece upon vertical axes (Fig. 2) whilst the hoop 9 is preferably connected to arm 13 by means of a member 12, also pivoted on vertical axes.

The guiding arm 13 is connected at a point adjacent to its rear end by a link 14 to a projection of a travelling member 17 movable along bar 1*a*. Said projection is guided in a slot 18 in said bar and includes a pivot part upon which is pivoted one end of a link 15, the other end of

[*Price* 1/-]

frame of a door of the vehicle and is preferably provided with an indiarubber piece forming an upright for a window frame.

6. A hood as claimed in Claim 1 in which the forward part of the body becomes narrow towards the front, and wherein the end piece of the hood is connected to the end of said sliding arm by means of a member pivoted to said arm and to said end pieces on preferably vertical axes.

7. A hood as claimed in Claim 1 in which the hoop or hoops are connected to the arms by means of members pivoted on preferably vertical axes.

8. A hood as claimed in Claim 1 in which the folding operation is effected against the action of a spring which presses against the front part of the rear framework, thus assuring the tension of the canvas when in use.

9. A hood as claimed in Claim 1 wherein the rear framework is provided with means for rotating it.

10. A hood as claimed in Claim 9 wherein said means includes an electric motor provided with a speed reducing gear and a reversing switch.

11. A hood as claimed in Claim 1 in which the space provided for the folded hood in the rear at the sides is adapted to be closed by flaps which ensures the continuity of the torpedo outline and which are preferably provided with controls, independent or not.

12. A hood as claimed in Claim 1 in which the end of the canvas is fixed within the space provided for the folded hood in the rear of the vehicle body.

13. A hood substantially as described and represented in the annexed drawings.

Dated the 12th day of July, 1935.

R. M. NEILSON,
98, West George Street, Glasgow, C.2.
Chartered Patent Agents.

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other end on a pivot 67 carried by the actuating quadrant 11.

The end of each arm of the hoop 66 has an upwardly directed extension 69 which carries the hinge pin 70 of an intermediate hoop 71 on which is fixed the end of the cloth 8 forming the rear portion of the hood. Each arm of the hoop 71 is slightly extended below the hinge pin 70 and has at the end of this extension a hinge pin 73 of another intermediate hoop 74.

The whole arrangement is completed by a driving device for the quadrant 11, for example by an electric motor not shown, and by means of a chain 76 and of sprockets 78 and 79.

The U-shaped opening of the housing 5 can be closed by flaps not shown, as described in my co-pending application Serial No. 46,845.

The operation is as follows:

In the position shown in Fig. 1, the hood is unfolded that is to say that the nose-piece 38 rests on the wind screen 39, the bar 35—36 is substantially in contact with the upper edge of the windows 2, the carriage 30 is in its upper position at the upper end of the guideway 17, the intermediate connecting rod 31, as shown in Figs. 4 and 6, is horizontal and the connecting member 48 is in alignment with the bar 36 as shown in Fig. 7.

of its vertical position, the sliding bar 35 as at the end of its travel within bar 36 which is limited by a stop and the lever 47 pushes the tail 44 and swings the connecting member 48. The lateral displacement of the telescopic bar 35—36 which then takes place positively causes the intermediate connecting rod 31 to swing about the pivot 29 and along the curved part 30 so that the bar 35—36 passes from the position shown in Fig. 11 to the horizontal position shown in Fig. 10. The pull exerted on the strips of fabric connecting the hoops to each other in the usual manner as known, causes the displacement of the rear portion of the hood.

It will be seen that the two operations can take place without being hindered by the windows whether they be in the lowered position or not.

Referring to the modification shown in Figs. 12 to 15, the pivots 21 and 22 of the rollers 18 and 19 mounted in the guide-way 17 provided in the upright 16 of the hoop 9 are extended a length which is at least equal to that of the transverse displacement it is desired to allow the rear end of the bar 36. The plate 28 is slidably mounted on the extensions of said pivots 21 and 22 and is subjected to the action of springs 81 and 82 which urge same in the direction of the upright

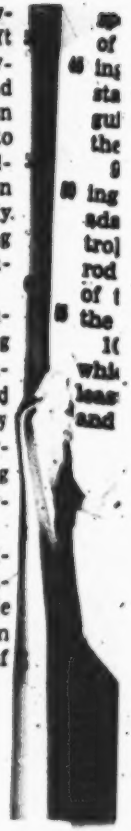
at the rear of the body and a working position in which said arm is at the fore of the rear end of said window and thus forms an intermediate upright, a front frame including on either side of the body a guiding bar and a further bar in line with said guiding bar and in sliding engagement therewith, a linkage between said bars and said supporting hoop for holding said bars and controlling said latter between the horizontal position in which said bars are above said window and a folded up position, connecting means between the rear end of said guiding bar and said arm adapted to allow said guiding bar to be displaced between a working position in which it is above said window and a further position in which it is laterally displaced to allow the folding of the hood without being hindered by said window.

2. A combination as claimed in claim 1 in which said body is provided on each side with a fore and a rear window and wherein each arm of said supporting hoop is disposed in its working position substantially vertically and between said two side windows.

3. In the combination of a folding hood with a vehicle body, a body provided on each side with at least one window, a front supporting hoop, to said carriage, said connecting rod being pivoted on said carriage about an axis fore and aft directed with reference to said vehicle and carrying a further pin, parallel with said axis and connected to said rear end, the distance between said last named pin and axis corresponding to the necessary movement of the rear of said guiding bar to be brought from its working position in which said connecting rod is substantially horizontal to a position in which said guiding bar is inside the body with reference to the window and conversely.

6. A combination as claimed in claim 5 comprising a hinge bracket, included in said carrying means between said guiding bar and said connecting rod, said last named pin being carried by said hinge bracket, a further pin transversally directed with reference to the vehicle and carried by said hinge bracket, said guiding bar being mounted for pivotal movement about said further pin.

7. A combination as claimed in claim 5 including a guide cam carried by said arm, said connecting rod being adapted to engage said guide cam which positively controls at least its motion in the direction corresponding to the folding of



[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 1

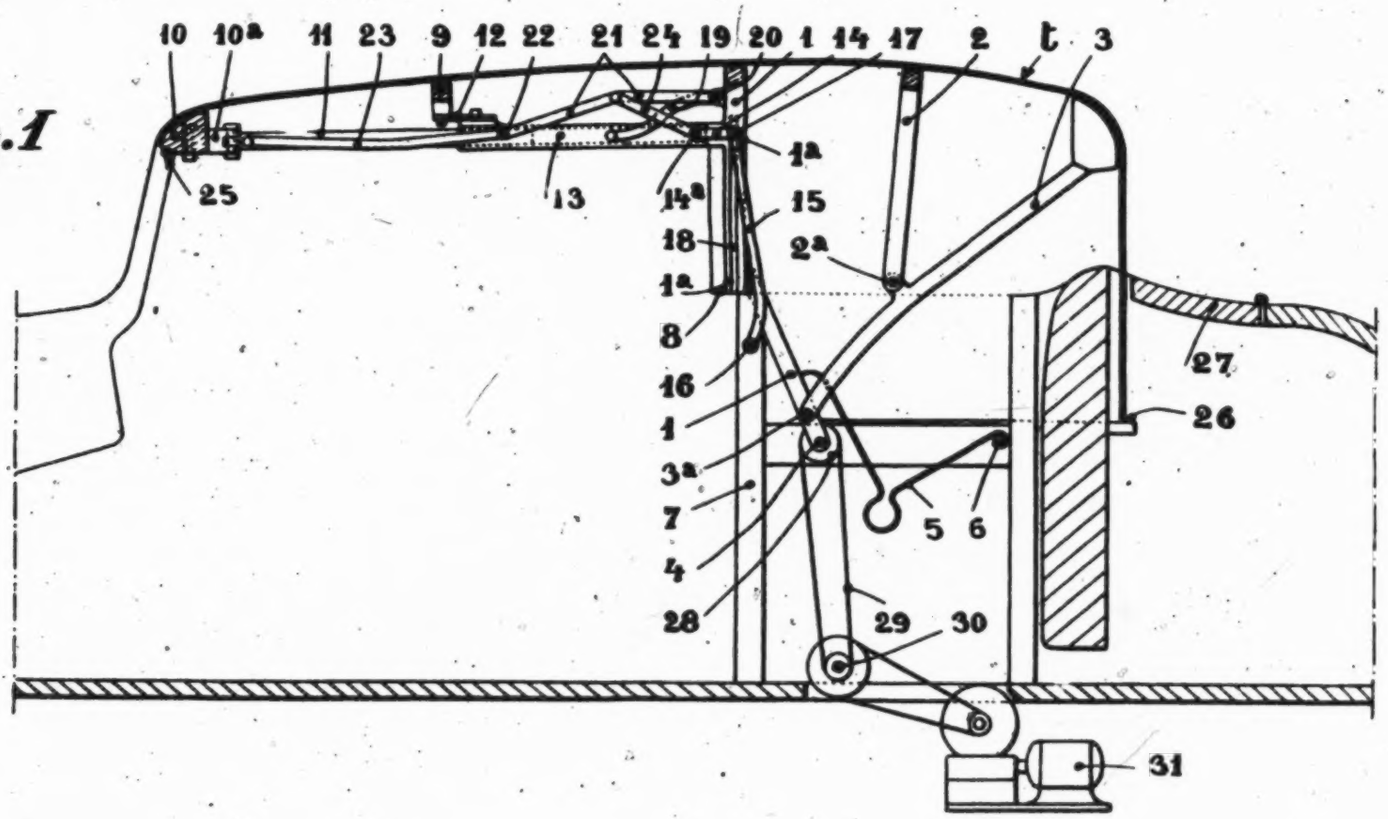


Fig. 3

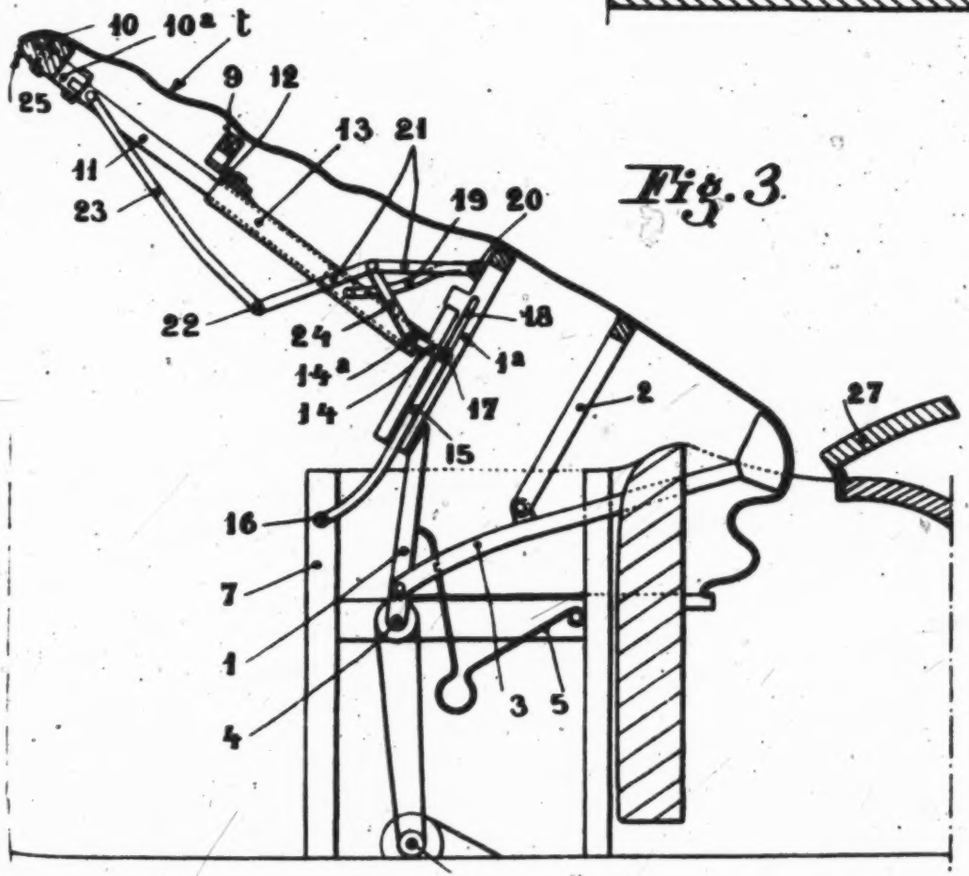
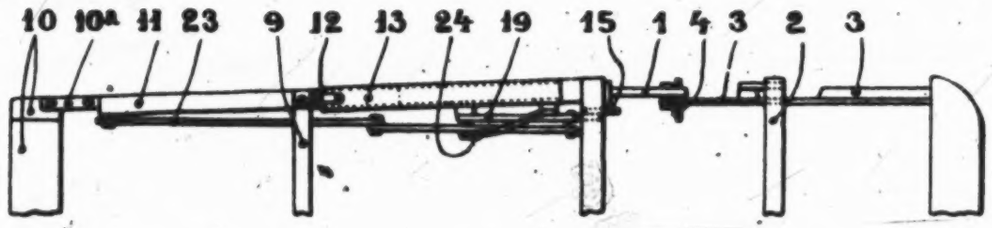


Fig. 2



April 17, 1951 J. W. J. ACKERMANS 2,549,153

FOLDING TOP FOR AUTOMOBILES

Filed May 1, 1946 3 Sheets-Sheet 1

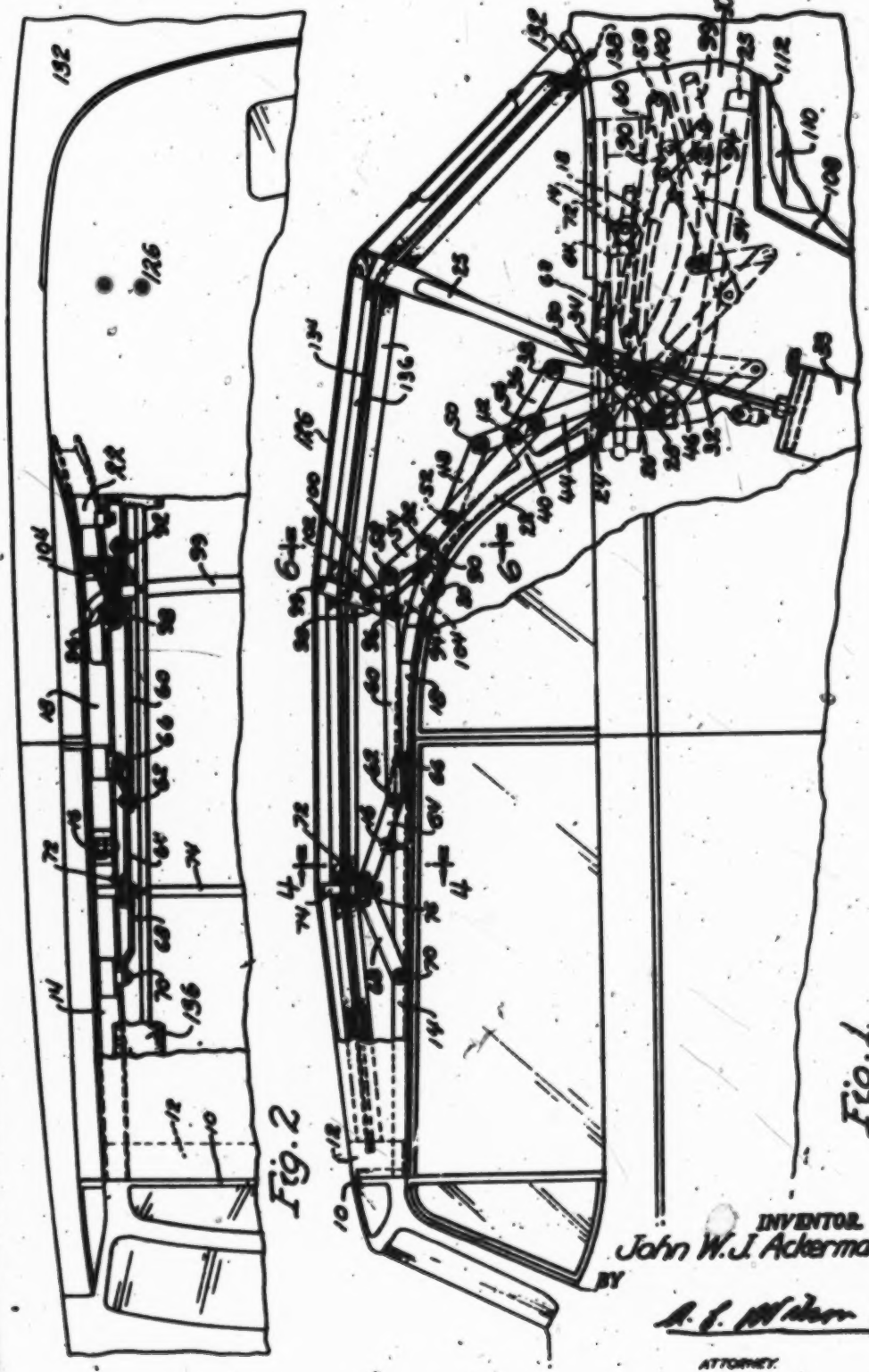


Fig. 2

Fig. 1

INVENTOR.
John W. J. Ackermans
BY
A. E. Wilder
ATTORNEY

April 17, 1951 J. W. J. ACKERMANS 2,549,153

FOLDING TOP FOR AUTOMOBILES

Filed May 1, 1946 3 Sheets-Sheet 2

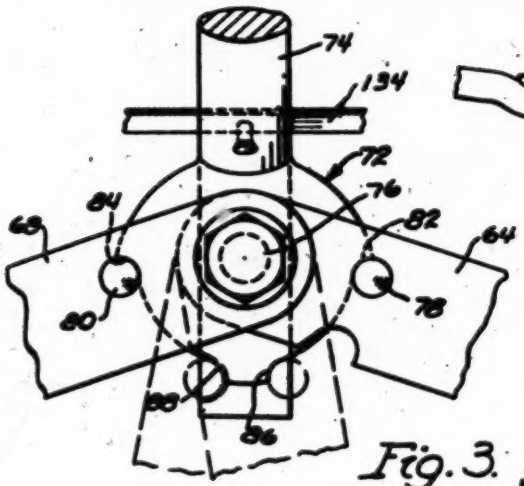


Fig. 3.

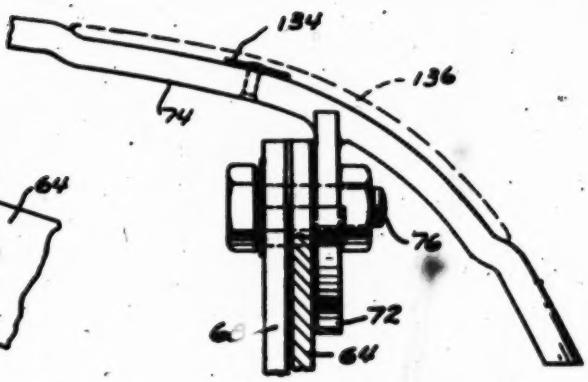


Fig. 4.

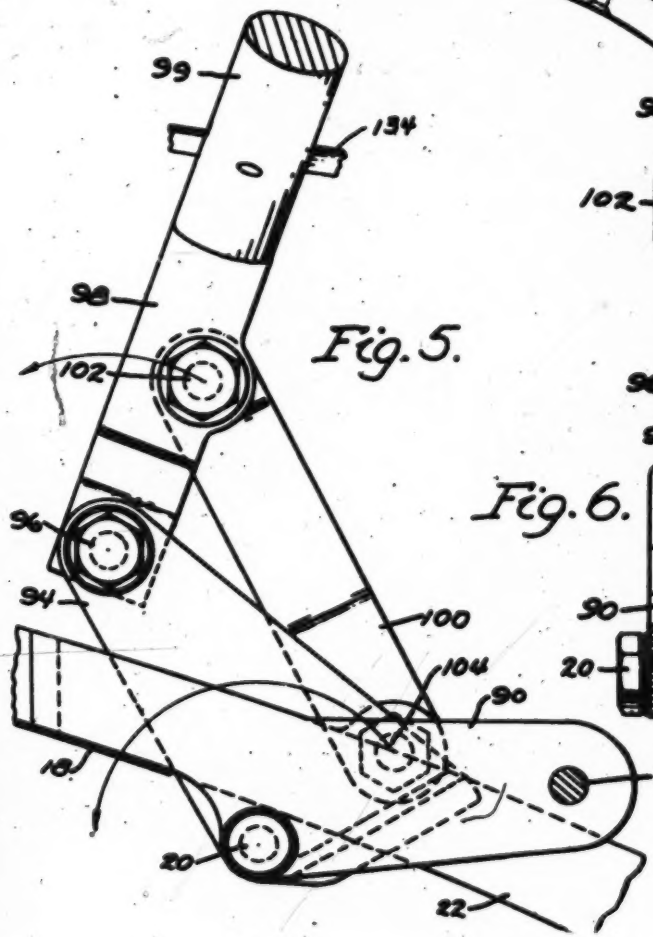


Fig. 5.

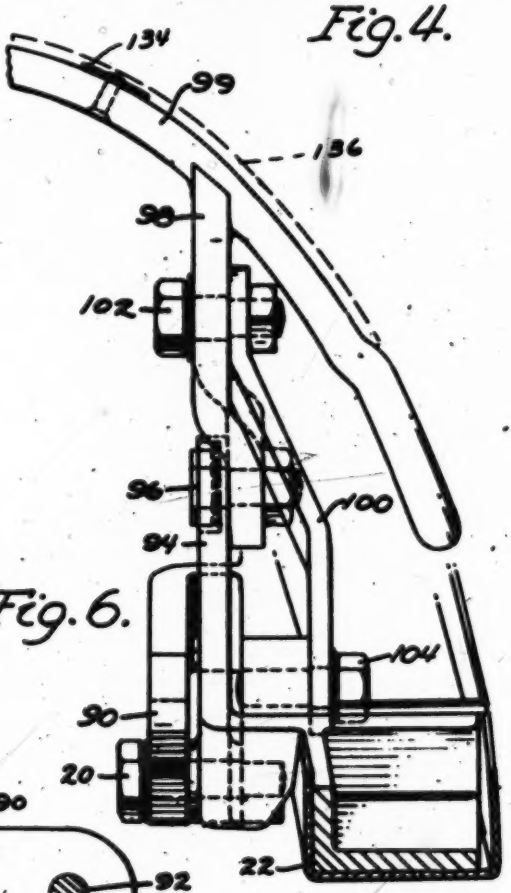


Fig. 6.

INVENTOR.
John W. J. Ackermans
BY

which is pivoted to a fixed point 16 spaced from the pivot axle 4 of the rear framework. On the other hand, a point of the arm 13 is bound by means of a link 19 to turn about a fixed point 20 of the support 1, this fixed point being represented by an axle which traverses a lug and also serves as a pivot for another link 21. This latter forms a toggle joint with another link 23 pivoted at 22 to it and leading to the front end of the arm 11. Lastly, the guiding arm 13 is connected by a connecting rod 24 to the link 21, said rod being pivoted on the pivot point 14*a* of the link 14 upon the arm 13.

When the canvas is in use, the studs 25 mounted on the end-piece are engaged in the upper edge of the windscreen-frame. At its other end, the canvas is attached at 26-to a small cross-piece within a space provided for the folded hood at the rear of the vehicle.

A transverse flap 27 serves normally to close the upper part of said space. In the represented construction, in which a spider is provided, the said flap coincides with the outline of the spider. Two other flaps, in longitudinal situation (not shown) are preferably mounted at the sides, between the upright 7 and the flap 27, in order further to conceal the folded hood.

Supposing the case in which there is no mechanical control, it will be readily observed that after raising the flaps, the operator can fold up the whole arrangement by simply turning the hoop 1 to the rear, about the axle 4 used as a pivot. Fig. 3 shows one step in this folding. The folding of the rear part is directly due to the movement of the hoop 1 and the folding of the front part is due to the drawing of travelling member 17 by the bar 1*a*, which thus pivots the link 15; this causes a sliding of the end of the arm 13 along 1*a* and, by the connecting rod 24, the folding of the joint 21—23, so that the arm 11 will telescope into the arm 13 which latter will gradually come near 1*a* and will be superposed upon the same.

However, it is feasible to employ for operate in the contrary direction and thus return the hood to the position shown in Fig. 1.

It is also feasible to utilize the engine of the vehicle itself by the use of suitable transmission gear and the like, or use can be made of vacuum.

Obviously, the invention is not limited to the form of construction represented and described which have been chosen solely by way of example.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:

1. A vehicle hood comprising the combination of a rear framework pivoted to the body of the vehicle and adapted to fold up fanwise or the like with a front framework including on each side a guiding arm and a further arm in sliding engagement with and aligned with it, the structure formed by said two last named arms being connected, on one hand, to at least one fixed point of said rear framework, and on the other hand, to a point of said body spaced from the pivot point of said rear framework, in such a way that when the latter is folded up, this will cause the folding of the front framework and will bring it against the folded rear framework.

2. A hood as claimed in Claim 1 comprising, preferably on each side, a travelling member in sliding engagement with a support included in said rear framework, a lever pivoted to said travelling member and to said point spaced from the pivot point of said rear framework, a guiding arm connected to said travelling member, a point of which guiding arm is bound to turn about a fixed point of said support by means of a link or the like, a further arm in sliding engagement with and aligned with said guiding arm, and connecting levers between said further arm and said support whereby said further arm is adapted to slide relatively to said guiding arm upon rotation of said support.

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FOLDING TOP FOR AUTOMOBILES

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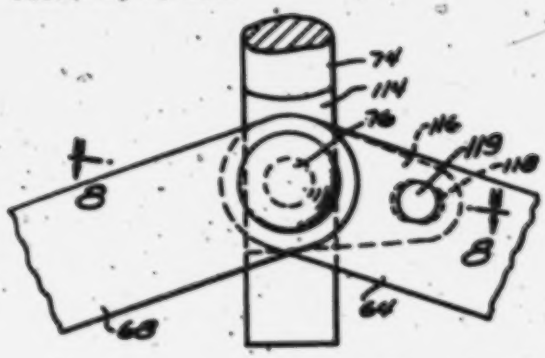

Fig. 7.

Fig. 8.

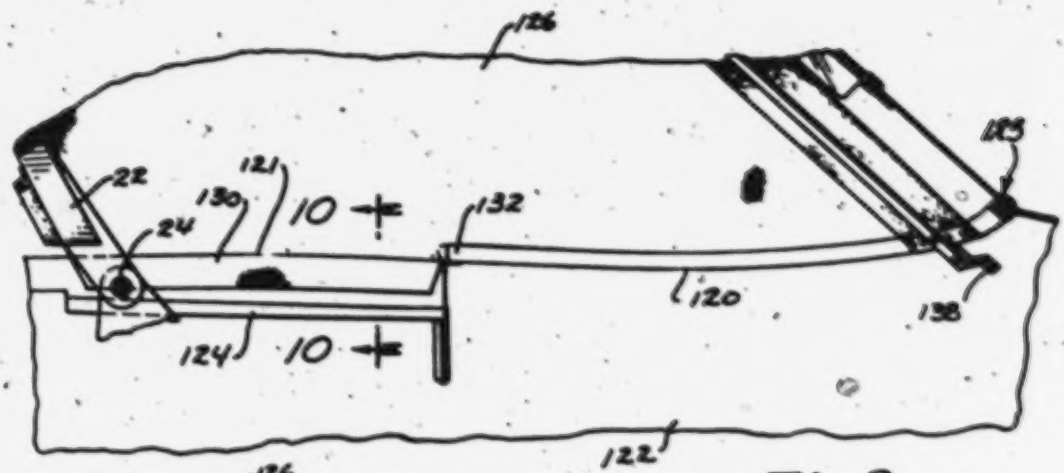

Fig. 9.

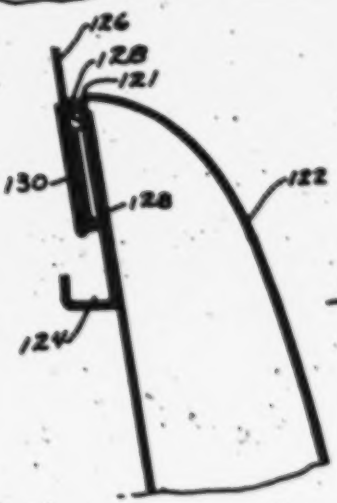

Fig. 10.

INVENTOR.
John W. J. Ackermans
BY
A. L. Wilson
ATTORNEY.

Patented Apr. 17, 1951 2,549,153

UNITED STATES PATENT OFFICE

2,549,153

FOLDING TOP FOR AUTOMOBILES

John W. J. Ackermans, Detroit, Mich.

Application May 1, 1946, Serial No. 666,413

18 Claims. (Cl. 296—107)

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This invention relates to collapsible tops for motor vehicles, and more particularly to an improved top construction so designed as to provide maximum seating capacity, spare wheel and luggage space, and a smaller top booth inside the vehicle to provide minimum interference when the top is moved to the collapsed position.

A great deal of effort has been devoted to the design of collapsible tops, but the tops heretofore developed have possessed inherent disadvantages in that they have been cumbersome to operate and did not possess any readily operable positive means for locking some of the top bows in predetermined up or down positions to provide a rigid construction that would withstand the vibration and shock loads to which tops are subjected in use, and prevent rattle of the actuating means.

An object of this invention is to provide a collapsible top designed to provide minimum interference when in the folded position, and embodying mechanism to securely hold the top bows when in the up position in such a manner that vibration and shock loads to which the top is subjected will not loosen the top or cause it to rattle.

An important object of this invention is to permit the folding top to nestle in a shallower space or booth above a shelf under which the spare wheel may be stored in such a manner that when the top is down it is substantially flush with the general lines of the upper body contour of the vehicle.

A further object of the invention is to provide an improved folding top so designed as to provide maximum seating capacity particularly in the rear seat, a relatively short and narrow space being provided behind and at the sides of the rear seat to form a booth or compartment for the reception of the top when in the folded or collapsed position.

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of the body at the belt line whereby no snap fasteners are required on the outside of the body to insure a tight weatherproof joint.

Still another object resides in the provision of an improved separable juncture seal or barrier associated with the lower forward portion of the top fabric extending downwardly within the body and its inner wall adjacent the belt line, whereby the top fabric or material remains inside the body at all times and need not be manually moved to the outside of the body surface to prevent leakage after the top has been raised to the up or elevated position.

Another object of the invention resides in the provision of a collapsible top adapted to permit greater coordination between the styling of the top and body of the vehicle, thus improving the general appearance of vehicles having convertible tops.

Other objects and advantages of this invention will be apparent from the following detailed description considered in connection with the accompanying drawings, submitted for purposes of illustration only, and not intended to define the scope of the invention, reference being had for that purpose to the subjoined claims.

In the drawings wherein similar reference characters refer to similar parts throughout the several views:

Fig. 1 is a side elevation, partly in section, of a vehicle embodying this invention.

Fig. 2 is a fragmentary top plan view partly in section of the vehicle illustrated in Fig. 1.

Fig. 3 is a fragmentary side view of the auxiliary bow control and locking mechanism illustrated in Fig. 1.

Fig. 4 is a sectional view taken substantially on a line 4—4 of Fig. 1 looking in direction of the arrows.

Fig. 5 is a fragmentary side view of the main bow control mechanism.

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on the line 10—10 of Fig. 9 looking in the direction of the arrows.

Before explaining in detail the present invention, it is understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

Referring now more particularly to Fig. 1 it will be observed that a header bar 10 is fixedly secured to a vehicle body. The header bar 10 may be provided with front and top windows to insure good visibility from the driver's compartment of the vehicle.

A front bow 12 to which is secured the fabric or other suitable covering of the top material is carried by front side rails 14 in such a manner as to be rigid therewith. In the description hereinafter, only one side of the top is described, but it will be understood that the other side may be similarly constructed. The rear end of the side rail 14 is connected by a pivot 16 to the forward end of a rear side rail 18, which in turn is connected by a pivot 20 to a folding pillar 22. The pillar 22 is hingedly mounted on a main top pivot 24 carried by a suitable bracket secured to the body of the vehicle.

A rear bow member 25, and a lower power link 28 are pivotally mounted at 29 on a suitable bracket secured to the body of the vehicle. An arm 30 carried by the lower power link 28 is pivotally secured to a reciprocable rod 32 of a power unit 33 by means of a yoke 34 in such a manner that actuation of the power unit 33 oscillates the power link 28 about the pivot 29 to raise and lower the top. The power unit 33 may be actuated in any convenient manner as by compressed air, vacuum, hydraulic or electric power.

In the event the power unit should fail for any reason, the top may be elevated or lowered manually by lifting the front bow and the front side rails. The interconnected links and levers guide the top structure accurately to the header bar 10 as the top is being elevated, and guide it into the storage booth when the top is lowered. The interconnected links and levers may be said to be self-contracting since the framework is so designed and proportioned as to maintain accurate alignment to move the interconnected elements to predetermined positions as the front bow and the front side rails are moved manually or the actuating mechanism moves the main bow carrying members.

An upper power link 36 is secured by means of a pivot 38 to the upper end of the lower power link 28. The opposite end of the upper power [illegible] pivoted to an arm 42 carried

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intermediate portion of an auxiliary bow rear link 64 having one end 66 pivoted to an intermediate portion of the rear side rail 18. An auxiliary bow front link 68 is pivoted at 70 to an intermediate portion of the front side rail 14. The front and rear auxiliary bow links 68 and 64 are secured by means of a bolt or pivot pin 76 to a bracket 72 fixed to an auxiliary bow 74 as illustrated more clearly in Figs. 3 and 4. As shown in Fig. 4, the outer portion of the bow slopes downwardly at a considerable angle, and the bracket 72 is secured to the bow at a substantial distance from the end thereof.

The auxiliary rear and front bow links 64 and 68 are provided with stop members 78 and 80 adapted to move into engagement with shoulders 82 and 84 on the bracket 72 when the top is in the up position, and to move into engagement with shoulders 86 and 88 carried by the same bracket 72 when the top is in the down position.

A bracket 90 is fixed to the rear part of the side rail 18 and is connected by a pivot 92 to an intermediate portion of the balancing link 54 as illustrated. A bracket 94 fixed to the folding pillar 22 is pivotally connected at 96 to a main bow supporting bracket 98 carrying a main bow 99 as more clearly illustrated in Figs. 5 and 6.

A quadrant 100 is pivoted at 102 to an intermediate portion of the main bow supporting bracket 98, and is pivoted at its lower end to the bracket 90 on the rear part of the side rail 18 at 104.

The pivots 24, 29 and 46 may be carried by a single bracket secured in the side of the vehicle body.

The operation of this collapsible top is as follows. When the top is in the up position as illustrated in Figs. 1 and 2, it is only necessary to release the locking catches (which may be of the type shown in Ackermans Patent No. 2,486,905, issued November 1, 1949) securing the front bow 12 to the fixed header bar 10, and actuate a control mechanism whereupon the rod 32 of the power unit 33 moves downwardly to oscillate the lower power link 28 about its pivot 29 in the clockwise direction as viewed in Fig. 1. Oscillating movement of the lower power link 28 is transmitted through the upper power link 36 to rotate the folding pillar 22 about the main top pivot 24 in the clockwise direction. Rotation of the folding pillar 22 is transmitted through the lower and upper balancing link control members 44 and 48 and the balancing link 54, auxiliary bow control bar 60, rear and front auxiliary bow links 64 and 68, to move the top to the down position as illustrated in dotted lines in Fig. 1.

It will be noted that when the top is moved to the down or collapsed position it folds into a compartment or booth 106 extending across the back and along the sides of the rear seat of the vehicle. A space 108 is provided beneath a pa[illegible]

vide suitable clearance and avoid interference with the other elements of the top construction when the top is moved to the down or stored position. This action is obtained by selecting the distance between the pivots 102 and 104 of the quadrant 100 in such a manner that the quadrant 100 exerts a pushing force to move the main bow 90 in the counter-clockwise direction as viewed in Fig. 5, when the lowering action of the top starts, and this pushing force is reversed in such a manner that the quadrant 100 exerts a tensioning or pulling force as the pivot 104 operating on the smaller arc passes under the pivot 102 pivoting about a larger arc as illustrated in Fig. 5. The exact position of the main bow 90 in the booth or compartment 106 can thus be accurately determined by proper selection of the points 102 and 104 with relation to the length of the quadrant 100 to insure easy storage of the top in the booth or compartment 106.

Attention is also directed to the fact that the auxiliary bow 74 is maintained in a predetermined angular relation relative to the side rails 14 and 16, both when the top is in the up and in the down positions.

The stop members 78 and 80 carried by the links 64 and 68 contact the stop shoulders 82 and 84 on the auxiliary bow bracket 72 as illustrated in Figs. 1 and 3 when the top is in the up position to maintain the auxiliary bow 74 in a substantially vertical position.

During the time when the top is being moved to the down position the auxiliary bow 74 is free to move angularly about the pivot 76 under the influence of the force exerted by the tension members 134 secured to the spaced bows, or the force exerted by the top material, or by the padding strips 136. One of these forces may be employed individually or they may all act concurrently. As the top approaches the down position illustrated in dotted lines in Fig. 1 the stop members 78 and 80 carried by the links 64 and 68 contact the stop shoulders 86 and 88 of the auxiliary bow bracket 72 to force the auxiliary bow 74 to occupy a substantially horizontal position between the side rails 14 and 16. The auxiliary bow is thus maintained in a non-obstructing position, and the top is folded in such a manner as to occupy minimum space in the booth or compartment 106. If the position of the auxiliary bow were not controlled it would move angularly to an obstructing position by the force of gravity and occupy a substantially vertically downwardly directed position or be pulled upwardly by the top fabric etc. thereby preventing compact folding of the top mechanism.

Figs. 7 and 8 illustrate a modified form of auxiliary bow actuating mechanism. The auxiliary bow 74 is secured to a bracket 114 having an arm 116 extending in parallel and contacting relation to the auxiliary bow rear link 64 and other link will move its associated side rail proportionately to the movement of the auxiliary bow 74.

Figs. 9 and 10 illustrate my improved construction for pressing the fabric of the folding top to the inside of the vehicle body in such a manner that the top material will be maintained in a predetermined position at all times when the top is up. The belt line of the body is indicated by the lines 120, 121 at the rear and forward portions respectively of the body, the line 120 being the lower edge of the belt molding 132, which serves to secure the lower edge of the rear portion of the top material 126 permanently in place, as indicated at 123 in Fig. 9. The line 121 represents the upper edge of the body panel 122, and the top material is not secured thereto, but is so arranged that it will fit snugly against the inner surface of the panel 122 when the top is in raised position. A trough 124 is provided to carry away water seeping through the juncture between the top and the body.

As illustrated, the top material 126 formed of fabric or any other suitable material is provided with seals 128 in the form of fins to contact the inner edge of the body at and below the belt line 121 to minimize the seepage of water through the juncture between the top and the body of the vehicle.

The lower forward portion of the top material is folded or reinforced with a weather-stripping section 130 having the seals 128 carried thereby. With this construction the top material having the weather-stripping section 130 attached thereto will be maintained in contact with the body at and below the belt line 121 when the top is up, and as the top has been moved to the final up position it will be unnecessary to manually lift the top material over the belt line 121 as is the case in many previous designs. In this manner a more workmanlike construction is provided, and longer life of the top is insured because it is not subjected to strains and distortions. The top material 126 is secured to the folding pillar 22 in such a manner that when the top is in the up position the portion between the belt molding 132 and the folding pillar is maintained under tension through the force exerted by the forward pull of the pillar.

Means are provided to maintain the top mechanism taut at all times, and to position each of the top carrying bows in a substantially predetermined position relative to the other portions of the top mechanism.

One desirable form of design includes tension members 134 interposed between the bows and padding 136 or incorporated in the padding 136. One end of each of the tension members is secured to the body of the vehicle as illustrated at 138, and the other end is secured to the front bow 12.

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As the top moves to the down position the tension members 134 move with the top material, and assume the folded position. The tension members 134 are preferably formed of relatively resilient non-stretchable material capable of transmitting considerable force, such for example as strips of steel ribbon or other material possessing the desired properties enumerated above.

I claim:

1. A main bow actuating mechanism for a folding top for a motor vehicle comprising a folding pillar, a bracket secured to the folding pillar, a side rail, a bracket secured to the side rail, main pivotal connecting means between both brackets, a main bow having an extension pivotally mounted on the upper end of the first mentioned bracket, and a quadrant pivotally connected to the extension and to the second mentioned side rail bracket at a point behind the main pivotal connection of both brackets, whereby when the top is in the up position the main bow is held in a predetermined position, and whereby the main bow is induced to move counterclockwise about its extension's pivot when moving to the predetermined down position in the booth.

2. In a folding top for a motor vehicle having a booth, a folding pillar having an upper extension, a side rail having a rearward extension, a main pivot between the pillar and the side rail below the upper end of the pillar extension and forward of the side rail extension's rear end pivot, a main bow bracket pivotally connected to the upper end of the pillar extension, an upper pivot on said bracket, and intermediate pivot between the main pivot and forward of the side rail extension's end pivot, and a quadrant between the intermediate pivot in the side rail extension and the upper pivot of the main bow bracket, said quadrant moving the main bow gradually counterclockwise, when the top is being lowered, to a substantially horizontal position in the booth to clear other folding top elements.

3. In a folding top for a motor vehicle, a folding pillar, a bracket fixed to the folding pillar, a side rail, a bracket fixed to the said rail, a main pivot connecting said brackets, a main bow having an extension bracket pivotally mounted on the upper end of the first mentioned bracket above said main pivot, a quadrant pivotally connected to the bow extension bracket and connected to the second mentioned bracket at a point spaced from the main pivot, whereby while the pillar is moving to a folding position the quadrant will move the main bow counterclockwise to position the main bow in a predetermined location.

4. In a motor vehicle comprising a body having a substantially vertical inner side wall terminating in a longitudinal belt line; a folding top comprising flexible top material having its lower rear edge secured to said body adjacent said belt line and having forwardly of said rear edge

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that any leakage of water therethrough is received and carried off by said trough.

5. In a motor vehicle comprising a body having a substantially vertical inner side wall terminating in a longitudinal belt line; a folding top comprising flexible top material having its lower rear edge secured to said body adjacent said belt line and having forwardly of said rear edge a flap extending within said body to a lower level than the belt line and forming a juncture with said inner wall, means for impeding flow of water and air past said juncture comprising a lateral cushion associated with said flap, a folding pillar hinged to said body below said belt line and secured to and exerting forward tension on the lower portion of said top material so that said cushioned flap is pressed against the inner side wall when the top is in the up position, and a trough within said body below said juncture to receive leakage of water therethrough.

6. In a vehicle body having a side structure terminating at its upper edge in a substantially horizontal belt line; a folding top including flexible top material secured to a portion of said body adjacent said belt line and having forwardly of said portion a prolongation of said material extending downwardly within the body, said prolongation being formed with a lateral cushion coacting with an inner upper part of said structure to form a water-shedding juncture, a folding top pillar hinged to said body and secured to and exerting longitudinal forward tension on the lower front portion of said top material when the top is up to force said cushion into contact with said inner upper part of said structure.

7. In a vehicle body having a side structure terminating in a belt line; a folding top comprising flexible top material having the rear portion of its lower edge secured to the body adjacent the belt line and having the forward portion of said lower edge forming a prolongation of said material extending downwardly within the body below the belt line, a lateral cushion carried by said prolongation, a folding pillar hinged to said body and secured to said top material to exert forward pull thereon and press said cushion against an inner upper part of said side structure when the top is in the up position.

8. A vehicle body having an inner side wall terminating in a belt line and a folding top comprising flexible top material having its lower rear edge secured to a portion of said body adjacent said belt line and having forwardly of said portion a prolongation of said material extending downwardly within said body, a folding pillar hinged to said body, said material being secured to said pillar, and a cushion associated with said prolongation and inner wall when said top is in raised position and forming a separable weatherproof juncture adjacent said belt line permitting said top being put in lowered position.

9. A vehicle body having an inner side wall

wardly extending prolongation remaining within said body in the raised and lowered positions of said top and thus leaving said belt line exposed as viewed from outside said body.

10. A vehicle body having an inner side wall terminating in a belt line and a folding top comprising flexible top material having its lower rear edge secured to a portion of said body adjacent said belt line and having forwardly of said portion a prolongation of said material extending downwardly within said body, a folding pillar hinged to said body, said material being secured to said pillar, and a cushion associated with said prolongation and inner wall when said top is in raised position and forming a separable weatherproof juncture adjacent said belt line permitting said top being put in lowered position, the force exerted by the forward pivoting of said pillar being used to close said juncture when said top is in raised position.

11. A vehicle body having an inner side wall terminating in a belt line and a folding top comprising flexible top material having its lower rear edge secured to a portion of said body adjacent said belt line and having forwardly of said portion a prolongation of said material extending downwardly within said body, a folding pillar hinged to said body, said material being secured to said pillar, and a cushion associated with said prolongation and inner wall when said top is in raised position and forming a separable weatherproof juncture adjacent said belt line permitting said top being put in lowered position, the force exerted by the forward pivoting of said pillar being used to close said juncture when said top is in raised position, and a trough within said body to receive leakage of said juncture.

12. A vehicle body having an inner side wall terminating in a belt line and a folding top comprising flexible top material having its lower rear edge secured to a portion of said body adjacent said belt line and having forwardly of said portion a prolongation of said material extending downwardly within said body, a folding pillar hinged to said body, said material being secured to said pillar, and a cushion associated with said prolongation and inner wall when said top is in raised position and forming a separable weatherproof juncture adjacent said belt line permitting said top being put in lowered position, said downwardly extending prolongation remaining within said body in the raised and lowered positions of said top and thus leaving said belt line exposed as viewed from outside said body, the force exerted by the forward pivoting of said pillar being used to close said juncture when said top is in raised position, and a trough within said body to receive leakage of said juncture.

13. In a folding top for a vehicle having a side window, two frame members pivotally connected end-to-end and forming a folding side rail conforming when the top is up to the upper edge of said window, a transverse roof bow normally dis-

said arm detachably connecting the two together to prevent angular movement therebetween and thereby maintain said bracket and bow in predetermined angular relation to said first link, said pivot pin, bracket, arm, and interengaging means constituting the sole attaching means between said bow and said links.

14. In a folding top for a vehicle having a side window, two frame members pivotally connected end-to-end and forming a folding side rail conforming when the top is up to the upper edge of said window, a transverse roof bow normally disposed in a substantially vertical plane and having a downwardly sloping outer portion, a bracket fixed to said bow at a point spaced substantially inwardly from the end of the bow and extending downwardly from said point, a pivot pin carried by said bracket, two links each pivotally connected to one of said frame members and pivotally attached to said bracket by means of said pivot pin, and coacting stop members on said links and said bracket operative at least when the top is in the up position for maintaining said bow in a substantially vertical plane while permitting the bow to rotate relative to the links while the top is being raised or lowered.

15. In a vehicle body of the type having upper and lower sections delimited by a belt line; a door hingedly mounted on one side of the body and including a slidable window and a rotatable window located forwardly of the slidable window, said windows having adjacent rectilinear edges, a fixed windshield assembly having a rearward extension forming the forward portion of a roof, and a top forming the rear portion of the roof and movable to a down position within the rear portion of said lower section and to an up position in abutting relation to said extension to form therewith a juncture aligned with said edges, said top including side rails and constituting the sole connection above the belt line between said extension and the rear portion of said lower section, said extension forming a support for the forward end of said top when the latter is in up position.

16. In a motor vehicle body of the type having upper and lower sections delimited by a belt line; a door hingedly mounted on one side of the body and including a slidable window and a rotatable window located forwardly of the slidable window, a frame for one of said windows fixed to the door and having a rectilinear edge abutting an edge of the other window, a fixed windshield assembly including corner posts and a rearward extension forming the forward portion of a roof, and a top forming the rear portion of the roof and movable to a down position within the rear portion of said lower section and to an up position in abutting relation to said extension to form therewith a generally rectilinear juncture aligned with said edges, said top including side rails and constituting the sole connection above the belt line between said extension and the rear portion of said

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deflect windstream and terminating in substantial alignment with said edges, and a collapsible top movable to a down position within the rear portion of said lower section and to an up position in abutting relation to said extension and constituting the sole connection above the belt line between said extension and the rear portion of said lower section.

18. In a motor vehicle body of the type having upper and lower sections delimited by a belt line; a door opening in one side of said body, a door mounted in said opening and including a slidable window and a rotatable window located forwardly of the slidable window, said windows having adjacent abutting edges, a fixed windshield assembly forming a forward portion of said door opening and including a rearward extension forming a portion of a roof and terminating in alignment with said edges, a hooded covering forming the remainder of said roof and constituting the sole connection above the belt line between said extension and the rear portion of said lower section, and means for securing the forward edge of said covering to the rear edge of said extension.

JOHN W. J. ACKERMANS.

REFERENCES CITED

The following references are of record in the file of this patent:

12

UNITED STATES PATENTS

Number	Name	Date
381,944	Morts	May 1, 1888
876,768	Bowen	Jan. 14, 1908
1,014,583	Zellers	Jan. 9, 1912
1,173,390	Pease	Feb. 29, 1916
1,177,944	Freeman	Apr. 4, 1916
1,211,107	Dori	Jan. 2, 1917
1,447,191	Vetter	Mar. 6, 1923
1,748,736	Selje	Feb. 25, 1930
1,826,426	Ledwinka	Oct. 6, 1931
1,884,441	Welch	Oct. 25, 1932
1,952,252	Heuser	Mar. 27, 1934
2,040,680	Westrope	May 12, 1936
2,076,243	Marshall et al.	Apr. 6, 1937
2,128,849	Redfern	Aug. 30, 1938
2,184,537	Valletta	Dec. 26, 1939
2,257,951	Haberstump	Oct. 7, 1941
2,267,471	Keller	Dec. 23, 1941
2,376,949	Westrope	May 29, 1945
2,382,635	Humer	Aug. 14, 1945
2,447,059	Eaton et al.	Aug. 17, 1948
2,448,054	Seckel	Aug. 31, 1948

FOREIGN PATENTS

Number	Country	Date
6,851	Great Britain	1915
21,124	Great Britain	1913
236,742	Great Britain	July 16, 1925
249,966	Italy	Aug. 27, 1926
312,281	Great Britain	Apr. 17, 1930
782,875	France	June 14, 1935

July 7, 1942. F. C. BEST 2,289,173

MOTOR VEHICLE

Filed Jan. 21, 1939 3 Sheets-Sheet 1

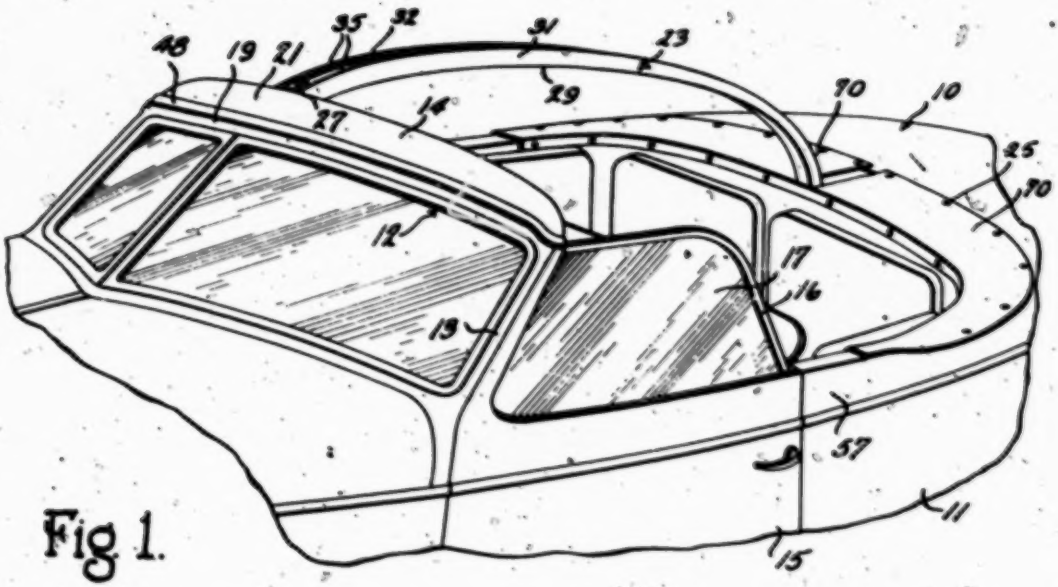
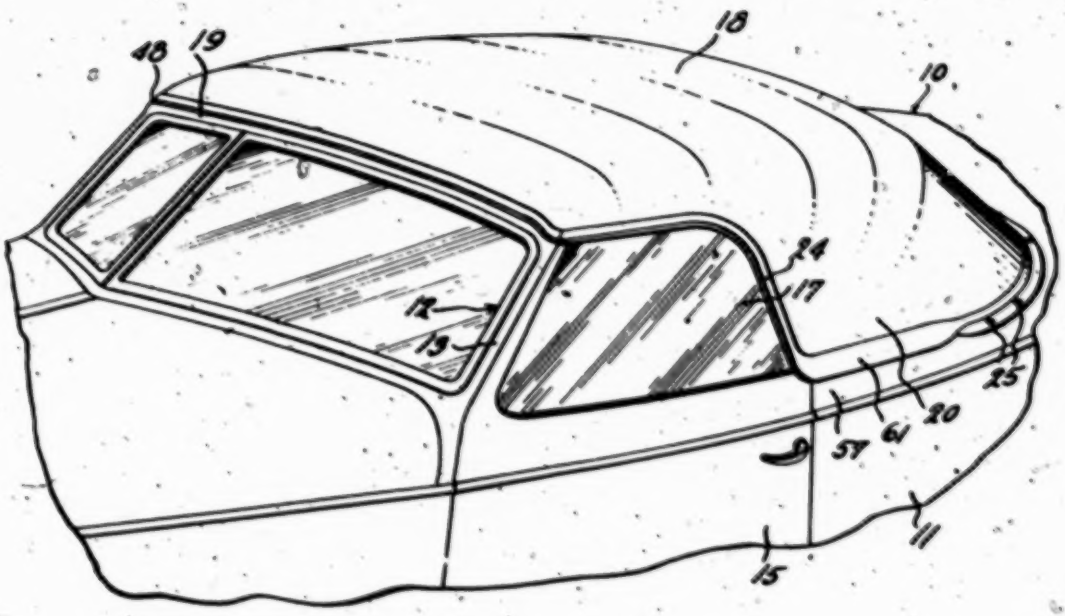


Fig 1.



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MOTOR VEHICLE

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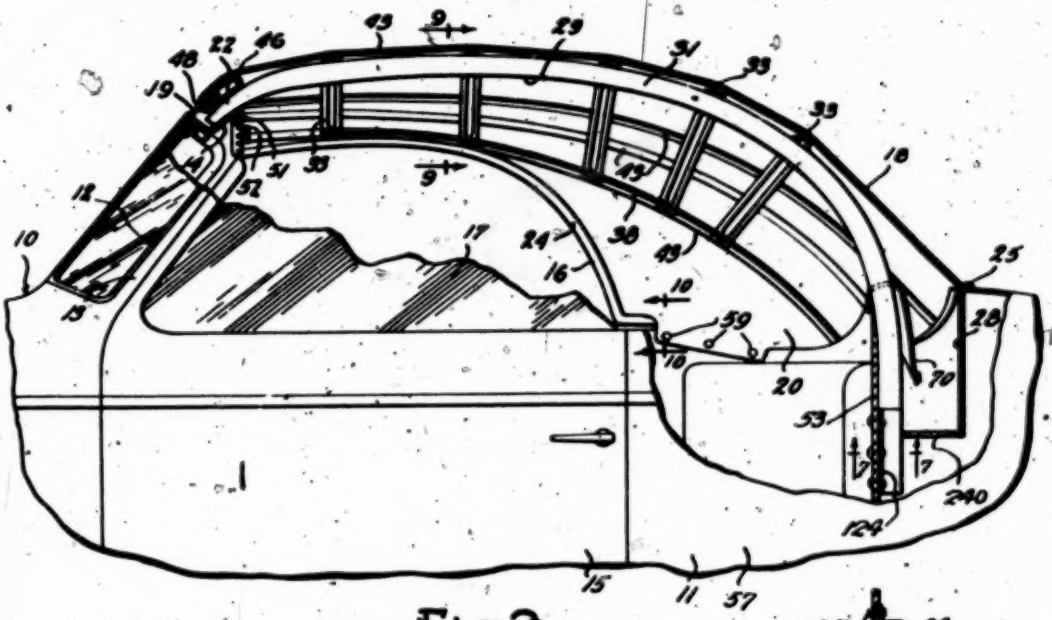

Fig. 3.

Fig. 7.

Fig. 4.

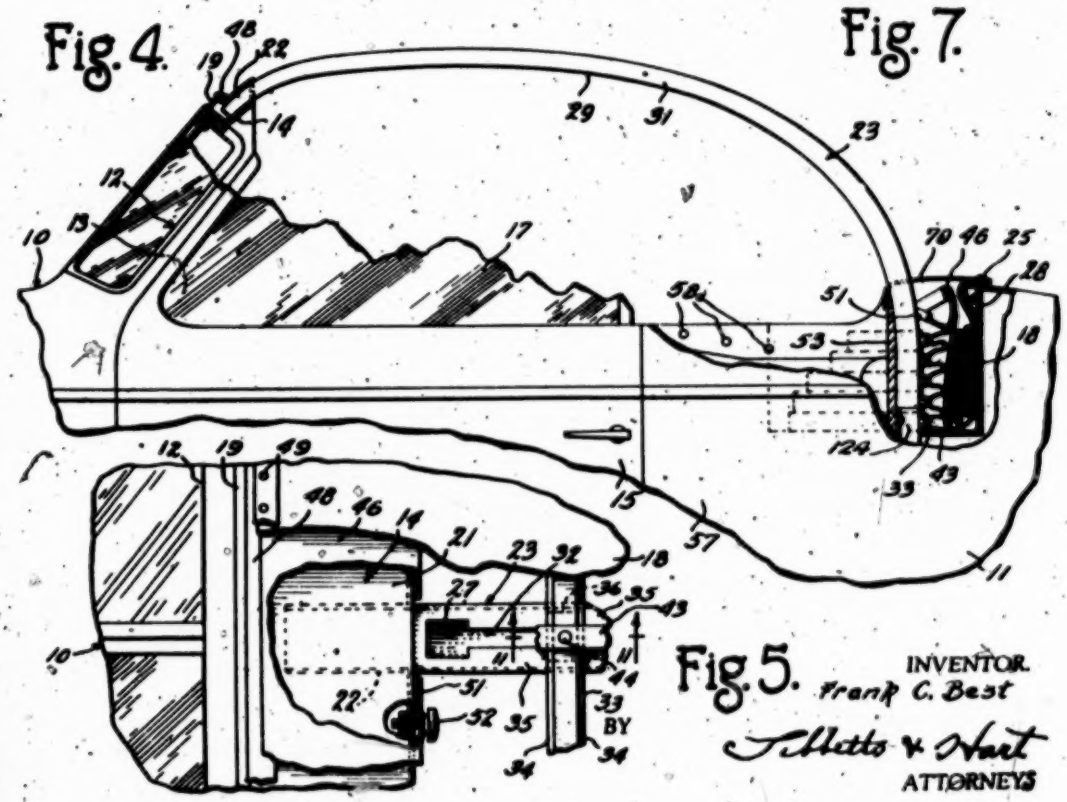

Fig. 5.

INVENTOR.
Frank C. Best
BY
Tillotta & Hart
ATTORNEYS

folding of the rear part is directly due to the movement of the hoop 1 and the folding of the front part is due to the drawing of travelling member 17 by the bar 1*a*, which thus pivots the link 15; this causes a sliding of the end of the arm 13 along 1*a* and, by the connecting rod 24, the folding of the joint 21—23, so that the arm 11 will telescope into the arm 13 which latter will gradually come near 1*a* and will be superposed upon the same.

However, it is feasible to employ for the said flaps, as well as for the hoop 1, various mechanical controls, either combinate or separate. The drawings show diagrammatically, by way of example, a control for the movement of the principal hoop 1 by means of an electric motor.

The two ends of the axles 4, one on each side, carry two respective sprocket wheels 28 connected by chains 29 to a common transverse shaft 30 which is driven, through speed-reducing gear, by a small electric motor 31. This latter is provided with a speed-reducing device and with a reversing switch in order to

pivot point of said rear framework, a guiding arm connected to said travelling member, a point of which guiding arm is bound to turn about a fixed point of said support by means of a link or the like, a further arm in sliding engagement with and aligned with said guiding arm, and connecting levers between said further arm and said support whereby said further arm is adapted to slide relatively to said guiding arm upon rotation of said support.

3. A hood as claimed in Claim 2 wherein said connecting levers include a toggle joint, one of the links of which is pivoted to a fixed point of said support and is further preferably connected directly or not to said guiding arm.

4. A hood as claimed in Claim 2 in which the travelling member includes a projection engaged in a slot of said support and connected by a rod to said guiding arm.

5. A hood as claimed in Claim 2 wherein said support is adapted to form the upper part of the rear upright of the

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MOTOR VEHICLE

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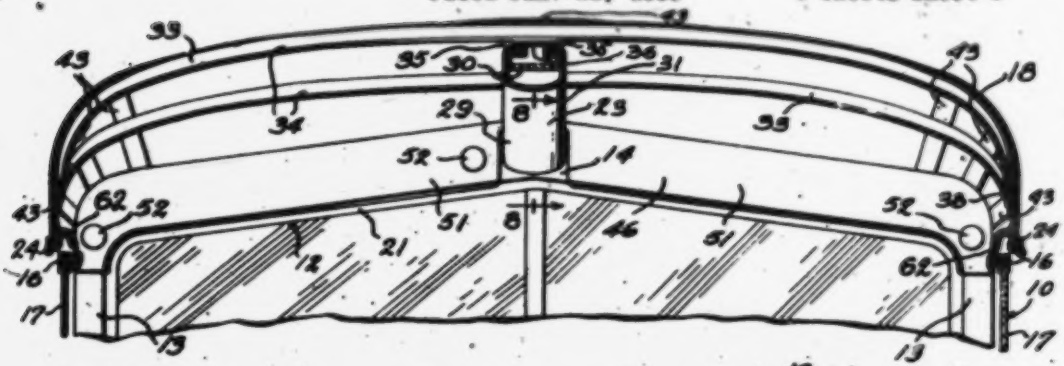

Fig. 6.

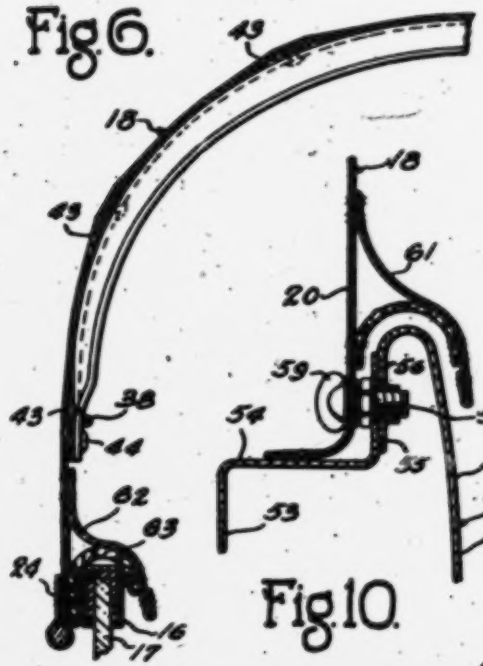

Fig. 9.

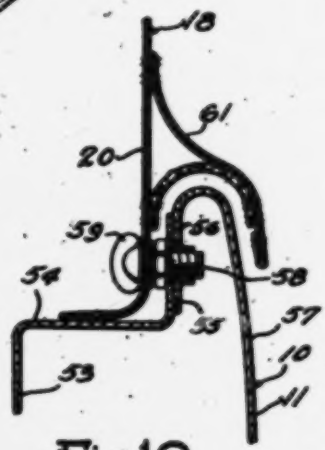

Fig. 10.

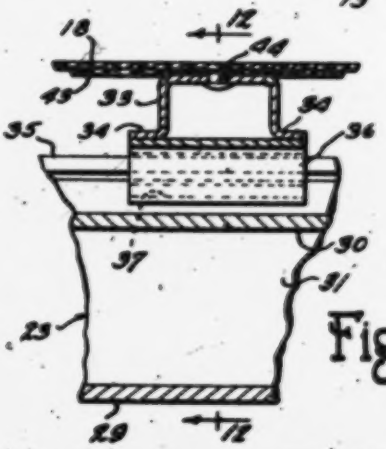

Fig. 11.

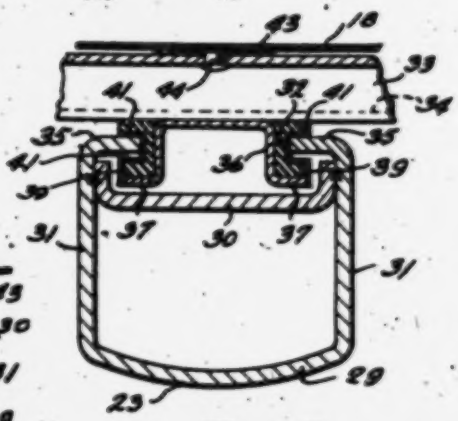

Fig. 12.

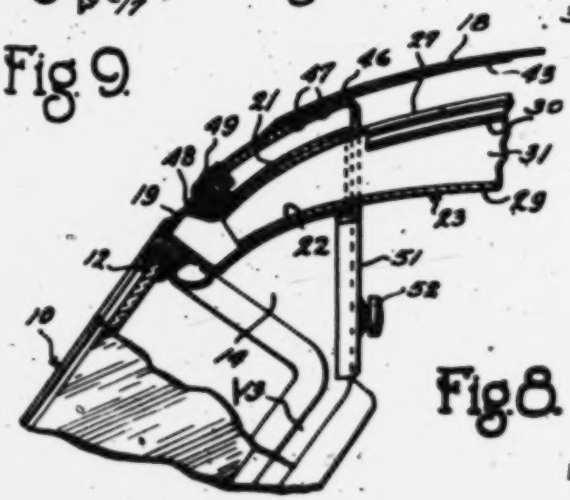

Fig. 8.

INVENTOR
Frank C. Best
BY
Schlitz & Hart
ATTORNEYS

A further object of the invention is to provide an improved folding top so designed as to provide maximum seating capacity particularly in the rear seat, a relatively short and narrow space being provided behind and at the sides of the rear seat to form a booth or compartment for the reception of the top when in the folded or collapsed position.

Yet a still further object of this invention is to provide novel flexible tension members to maintain the foldable portion of the top taut in such a manner that wrinkles are not permitted to form in the top when it is in the elevated or up position, and to maintain the plurality of bows and other top supporting linkage under tension in the up position by securing the tension members to the plurality of bows and linking and anchoring the lower rear end of the tension members to a rigid portion of the body structure proper.

A further object of the invention is to provide an improved separable juncture between the top fabric at its lower forward portion and the inside section of the vehicle illustrated in Fig. 1.

Fig. 3 is a fragmentary side view of the auxiliary bow control and locking mechanism illustrated in Fig. 1.

Fig. 4 is a sectional view taken substantially on a line 4—4 of Fig. 1 looking in direction of the arrows.

Fig. 5 is a fragmentary side view of the main bow control mechanism.

Fig. 6 is a sectional view taken substantially on the line 6—6 of Fig. 1 looking in the direction of the arrows.

Fig. 7 is a view similar to Fig. 3 showing a modified form of the invention permitting the auxiliary bow to be anchored securely to a bow link.

Fig. 8 is a sectional view taken substantially on the line 8—8 of Fig. 7 looking in the direction of the arrows.

Fig. 9 is a fragmentary side view of a portion of the top showing the belt rail.

Fig. 10 is a sectional view taken substantially

or the actuating mechanism moves the main bow carrying members.

An upper power link 36 is secured by means of a pivot 38 to the upper end of the lower power link 26. The opposite end of the upper power link 36 is pivotally secured to an arm 40 carried by the folding pillar 22 as illustrated at 42.

A lower balancing link control member 44 is pivotally mounted to the body as illustrated at 46, and is pivoted to an upper balancing link control member 48 as illustrated at 50. The opposite end of the upper balancing link control member 48 is pivoted at 52 to an arm carried by the folding pillar 22.

A balancing link 54 is pivotally mounted at 56 to an intermediate portion of the lower balancing link control member 44, and is pivoted at its opposite end at 58 to one end of an auxiliary bow control bar 60. The opposite end of the auxiliary bow control bar 60 is pivoted at 62 to an

position as illustrated in dotted lines in Fig. 1.

It will be noted that when the top is moved to the down or collapsed position it folds into a compartment or booth 106 extending across the back and along the sides of the rear seat of the vehicle. A space 108 is provided beneath a portion of the booth or compartment 106 for the reception of a spare wheel and tire 110, a shelf 112 being provided to separate the compartments 106 and 108.

Attention is directed to the fact that when the top is moved to the down position the main bow 30 moves forwardly and upwardly as indicated in Fig. 5 about the pivot 56 as the quadrant 100 is actuated in the top lowering direction. The main bow moves angularly to a predetermined folded position between the rear bow 26 and the pivot 56 in such a manner that the upper portion of the main bow 30 is maintained out of contact with the rear bow 26 and the shelf 112 to pro-

ing of the top mechanism.

Figs. 7 and 8 illustrate a modified form of auxiliary bow actuating mechanism. The auxiliary bow 74 is secured to a bracket 114 having an arm 116 extending in parallel and contacting relation to the auxiliary bow rear link 64 and having a hole or elongated slot 118 for the reception of a boss or pin 119 carried by the link 64.

This type of auxiliary bow controlling mechanism is advantageous in some types of folding tops where it is desirable to maintain the auxiliary bow in a substantially fixed predetermined angular position relative to one of the links 64 or 68. With this construction when the top is moved to the collapsed or down position the auxiliary bow 74 is maintained in substantially the same angular relation relative to the link 64 as it oscillates about the pivot 76 when moving between the up and down positions. With this construction it is necessary that only one of the links 64 or 68 be provided with a slap since the

One desirable form of design includes tension members 134 interposed between the bows and padding 136 or incorporated in the padding 136. One end of each of the tension members is secured to the body of the vehicle as illustrated at 138, and the other end is secured to the front bow 12.

The tension members are preferably provided at spaced points transversely of the top and extend from the front to the rear thereof. The tension members are secured to the rear bow 28, the main bow 60 and the auxiliary bow 74 in such a manner as to insure a predetermined position of each bow relative to the other bows when the top is in the up position. When the top is being elevated the force required to move the top to the taut position is carried through the tension members 134, and it is therefore unnecessary to subject the top material or the padding to tensioning strains that would stretch them out of shape to permit them to loosen up.

nected to the bow extension bracket and connected to the second mentioned bracket at a point spaced from the main pivot, whereby while the pillar is moving to a folding position the quadrant will move the main bow counterclockwise to position the main bow in a predetermined location.

4. In a motor vehicle comprising a body having a substantially vertical inner side wall terminating in a longidudinal belt line; a folding top comprising flexible top material having its lower rear edge secured to said body adjacent said belt line and having forwardly of said rear edge a flap extending within said body to a lower level than the belt line and forming a juncture with said inner wall, means for impeding flow of water past said juncture comprising a flexible weatherstrip secured to said flap and provided with an outwardly extending lateral fin, a folding pillar hinged to said body below said belt line and secured to and exerting forward tension on the lower front portion of said top material so that said fin is pressed against the side wall when the top is in the up position, and a trough within said body so aligned below said juncture

terminating [illegible]
prising flexible top material having its lower rear edge secured to a portion of said body adjacent said belt line and having forwardly of said portion a prolongation of said material extending downwardly within said body, a folding pillar hinged to said body, said material being secured to said pillar, and a cushion associated with said prolongation and inner wall when said top is in raised position and forming a separable weatherproof juncture adjacent said belt line permitting said top being put in lowered position.

9. A vehicle body having an inner side wall terminating in a belt line and a folding top comprising flexible top material having its lower rear edge secured to a portion of said body adjacent said belt line and having forwardly of said portion a prolongation of said material extending downwardly within said body, a folding pillar hinged to said body, said material being secured to said pillar, and a cushion associated with said prolongation and inner wall when said top is in raised position and forming a separable weatherproof juncture adjacent said belt line permitting said top being put in lowered position, said down-

said body in the raised and lowered positions of said top and thus leaving said belt line exposed as viewed from outside said body, the force exerted by the forward pivoting of said pillar being used to close said juncture when said top is in raised position, and a trough within said body to receive leakage of said juncture.

13. In a folding top for a vehicle having a side window, two frame members pivotally connected end-to-end and forming a folding side rail conforming when the top is up to the upper edge of said window, a transverse roof bow normally disposed in a substantially vertical plane and having a downwardly sloping outer portion, a bracket fixed to said bow at a point spaced substantially inwardly from the end of the bow and extending downwardly from said point, a pivot pin carried by said bracket, a link connected to said bracket by said pivot pin and pivotally connected to one of said frame members, a second link pivotally connected to the other of said frame members and pivotally attached to said bracket by said pivot pin, an arm fixedly related to said bracket, and interengaging means on said first link and

and having a rectilinear edge abutting an edge of the other window, a fixed windshield assembly including corner posts and a rearward extension forming the forward portion of a roof, and a top forming the rear portion of the roof and movable to a down position within the rear portion of said lower section and to an up position in abutting relation to said extension to form therewith a generally rectilinear juncture aligned with said edges, said top including side rails and constituting the sole connection above the belt line between said extension and the rear portion of said lower section, said extension forming a support for the forward end of said top when the latter is in up position.

17. In a motor vehicle body of the type having upper and lower sections delimited by a belt line; a door opening in one side of said body, a door therein including a slidable window and a rotatable window located forwardly of the slidable window, said windows having adjacent rectilinear edges, a fixed windshield assembly forming a forward portion of said door opening and including a rearwardly extending header panel shaped to

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2,289,173

UNITED STATES PATENT OFFICE

2,289,173

MOTOR VEHICLE

Frank C. Best, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a corporation of Michigan

Application January 21, 1939, Serial No. 252,139

3 Claims. (Cl. 296—107)

The present invention relates generally to motor vehicles and more particularly to body and top constructions therefor of the type commonly referred to as "convertible" and wherein the top may be raised or lowered to provide either an open or enclosed passenger compartment.

In vehicles of this general character employing a flexible top, the raising and lowering thereof has been a rather difficult and inconvenient operation and it has usually been necessary for the operator to complete the various connecting and securing operations from outside the vehicle, resulting at least, in a disagreeable inconvenience in inclement weather. Fabric or other flexible tops, at present employed, become pinched or wrinkled and require a considerable amount of body space when folded, are inclined to flutter and become noisy when the vehicle is in motion and present an ill-fitting appearance when in raised position. Moreover, in vehicle bodies of this type, it has been a difficult problem to provide a windshield frame of sufficient rigidity without the use of view-obstructing corner posts and headers.

It is therefore one of the objects of the present invention to overcome the objections to present convertible vehicle bodies by the provision of a body and flexible top construction, wherein the top may be easily and quickly raised or lowered and the various connections between the top and body made by one person from within the vehicle, offering full protection to the occupants in inclement weather.

Another object of the invention resides in the provision of a convertible top and vehicle body construction permitting the full use of aerodynamic principles in exterior design, resulting in greater efficiency, a reduction of wind noise, and

Other objects and advantages of the invention will become apparent from the following description taken in connection with the accompanying drawings in which:

Fig. 1 is a fragmentary perspective view of a motor vehicle employing the present invention and showing the vehicle with the top in lowered position;

Fig. 2 is a view similar to that of Fig. 1, but showing the top in raised position;

Fig. 3 is a fragmentary side view, partly in longitudinal section, of a vehicle incorporating the invention and showing the top in raised position;

Fig. 4 is a view similar to that of Fig. 3, but showing the top in lowered or folded position;

Fig. 5 is a fragmentary top plan view with parts broken away and showing the top supporting rail, the top header and the windshield frame header;

Fig. 6 is a transverse view, partly in section, taken from within the vehicle slightly to the rear of the windshield;

Fig. 7 is a fragmentary sectional view taken on the line 7—7 of Fig. 3;

Fig. 8 is a fragmentary view taken substantially on the line 8—8 of Fig. 6;

Fig. 9 is a sectional view taken substantially on the line 9—9 of Fig. 3;

Fig. 10 is a sectional view taken along the line 10—10 of Fig. 3;

Fig. 11 is a longitudinal sectional view taken on the line 11—11 of Fig. 5, and

Fig. 12 is a sectional view taken on the line 12—12 of Fig. 11.

Referring to the drawings, reference numeral 18 indicates a motor vehicle having a body forming a passenger compartment and provided with

subject to torsional stresses due to the lack of a rigid support above the passenger compartment between the windshield header and the rear of the body. In accordance with the present invention, the windshield header 14 is of substantial size and includes a transversely extending hollow section 18 supported above the windshield glass by the corner posts 13, and a hollow rearwardly extending socket portion 21 opening adjacent the vehicle center line to receive the forward end 22 of a stiff structural bracing element in the form of a rail 23. The supporting rail may extend into the hollow windshield header portion 21 in telescopic relation thereto, and be welded or otherwise secured in fixed position.

In order to present a stream-lined appearance and provide adequate passenger head room, the top supporting rail 23 may extend longitudinally above the passenger compartment in an upward curve and thence downwardly to the rear of the passenger compartment. The rear end of the rail extends into a top receiving well 28 formed in the body outside of the rear portion of the passenger compartment. This well is formed in the body structure by the inner body shell 53, the outer body shell 57 and a wall structure 248. The rail is secured in the well by a bracket 124 fixed to the rear of shell 53 by bolts 126. This construction resists torsional body stresses and lends exceptional rigidity to the open top of the body structure and also to the windshield frame, thus obviating the necessity for large, view-obstructing corner posts.

The supporting rail in the present invention is utilized as a support for the top fabric structure and to this end may be formed as a hollow box section comprising a lower wall 29, a spaced upper wall 30 and spaced integral side walls 31 provided with inturned horizontal flanges above the upper wall 30 forming a longitudinal slot 32, and spaced tracks 35. The top 18 is transversely supported by a series of slightly resilient spaced ribs 33 of channel section having outturned flanges 34 welded or otherwise secured to slidable retainers 36, adapted to enter the slot 32 in the supporting rail 23 and formed with out-turned flanges 37 cooperating with the tracks 35 to slidingly connect the retainers 36 with the supporting rail 23. The retainers may be inserted in the slot 32 through an enlarged portion 27 thereof adjacent the windshield header 14.

Inasmuch as the transverse supporting ribs 33 may be connected to form a radio antenna, as by lead wire 38 soldered thereto, suitable insulating material 39 may be secured to the sides of the retainers 36 and formed to provide grooves to receive metal channels 41 which in turn slidably cooperate with the tracks 35.

When the top is in raised position, the transverse supporting ribs 33 are maintained in proper spaced relation by a series of longitudinally extending web straps 43 suitably secured as by rivets 44 to each of the transverse ribs 33 and to a forward transverse top header 46 as at 47. when the ribs 33 are in slightly sprung position, so that a constant pressure is always exerted upon the top fabric to maintain it in a taut and unwrinkled condition.

In accordance with the invention, provision is made for completing the necessary securing connections between the top and body from inside the vehicle. In the present instance, the top header 46 is formed to overlie a sealing gasket 48 along the forward edge of the windshield header 14 and the forward edge of the top fabric 18 is secured to this header as by rivets 49. The header 46 may be provided with a bifurcated downwardly extending flange 51 adapted to overlie the inner face of the windshield header 14, and is in turn provided with thumb screws 52 to engage threaded openings formed in the windshield header for securing the top 18 in raised position.

Referring particularly to Figs. 9 and 10, the vehicle body comprises the inner body shell 53 having an outwardly extending transverse ledge position 54 formed with an upwardly extending flange 55 to engage the downwardly extending flange 58 of the outer body shell 57 extending above the inner shell. The fixed pins 59 of a series of separable snap fasteners may be secured to the outer shell 57 in spaced relation to each other and positioned to the rear of the vehicle doors 15, and the lower edges of the top panels 20 may extend downwardly below the upper edge of the outer body shell 57 to engage the ledge 54 of the inner body shell 53. The panels 20 may be provided with the movable parts 59 of the snap fasteners, cooperating with the pins 59 to secure the top fabric to the body at these points.

To guard against the entrance of water into the passenger compartment, a yieldable shield 61 is secured to the fabric of the panels 20 slightly above the outer body shell 57 and extends downwardly exteriorly of the body below the top of the outer shell 57. A curved strip of resilient fabric may be connected to extend from the panel 20 over the top of the outer body shell to the shield 61 adjacent the lower edge thereof. In this manner it is impossible for water to enter the passenger compartment at these points.

Similarly, the edges 24 of the fabric top forming the window openings extend inwardly of the window frames 16 beyond the outer peripheries thereof and resilient shields 62 are secured to the fabric and extend over the window frames 16 to the interior of the passenger compartment, a strip of yieldable fabric 63 extending between the fabric top and the shield closely engaging the window frame 16.

For closing the top well 28 when the top is in folded position, a cover 70 may be fixed at its forward edge adjacent the forward edge of the top well and extend across the well to be removably secured at 28.

In operation, assuming the top to be in lowered position, the well cover 70 is unsnapped and the

loosening the above connections and sliding the ribs and top fabric along the longitudinal support into the top well 78 and buttoning the top cover 76 in place.

It will be obvious to those skilled in the art that various modifications in construction and design may be made without departing from the spirit or scope of the invention, which is to be limited only by the appended claims.

What is claimed is:

1. A vehicle body comprising an open top structure, a transversely extending windshield header fixed to the front portion of said structure, a top structural member extending centrally and longitudinally over the open portion of the structure, means fixing the forward end of the top structural member to the windshield header, and means fixing the rear end of the top structural member to the open top structure adjacent the rear end of the open portion thereof.

2. A vehicle body comprising an open top structure, a transversely extending windshield header fixed to the front portion of said structure, a hollow elbow opening toward the rear and fixed to the central portion of said windshield header, a top structural member extending centrally and longitudinally over the open portion of said structure, said top structural member being seated in the rearwardly opening portion of the hollow elbow, and means fixing the rear end of the top structural member to the open top structure adjacent the rear end of the open portion thereof.

3. In a vehicle body, an open top passenger compartment, a windshield frame header at the forward end of the compartment, an open well in the body outside of the rear portion of the passenger compartment, a rigid top structural member extending centrally and longitudinally over the open compartment and projecting into the well, means fixing the forward end of the support member to the windshield frame header, means fixing the rear end of the support member projecting into the well to the body, and a top for the passenger compartment slidably mounted on the top structural member and collapsible into the well.

FRANK C. BEST.

Oct. 2, 1951 H. A. MACKIE ET AL 2,569,724

CONVERTIBLE FOLDING TOP WITH AUTOMATIC SEAL AT REAR QUARTER

Filed Aug. 12, 1949 2 Sheets-Sheet 1

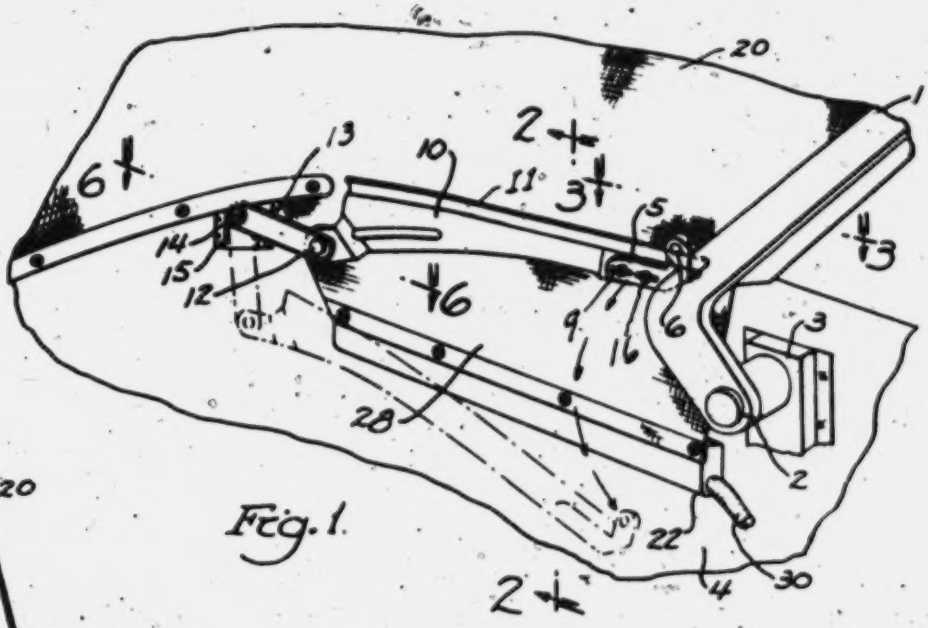

Fig. 1.

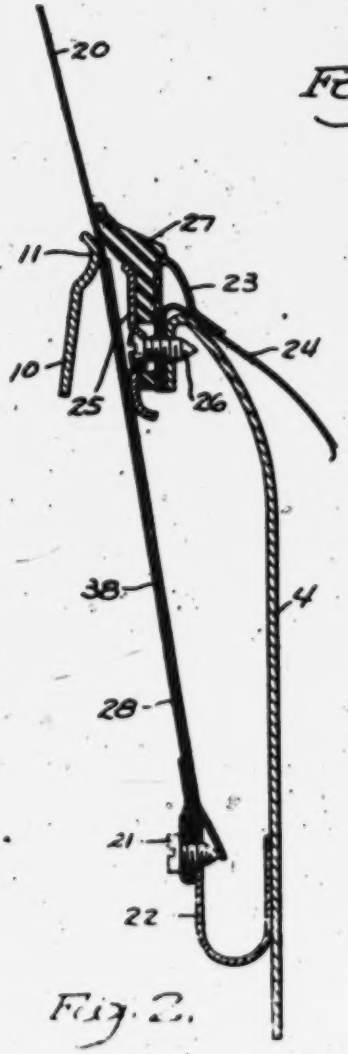

Fig. 2.

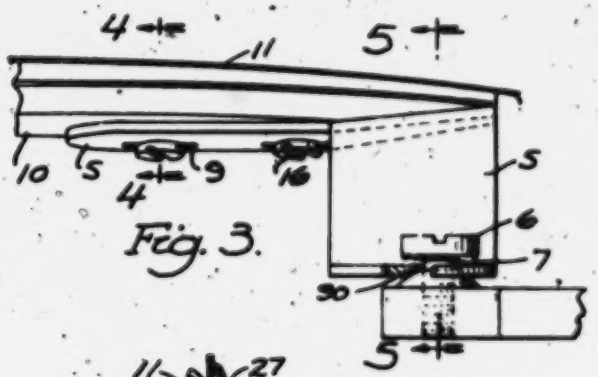

Fig. 3.

Fig. 4.

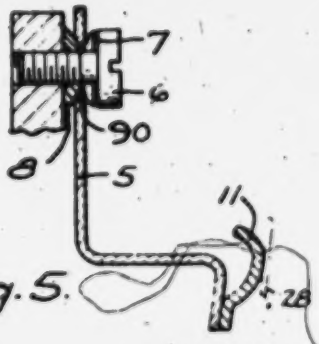

Fig. 5.

INVENTORS
Harry A. Mackie &
Stanley Duluk

By Barnes, Russell, Langham & Rose
Attorneys.

Oct. 2, 1951 H. A. MACKIE ET AL 2,569,724

CONVERTIBLE FOLDING TOP WITH AUTOMATIC SEAL AT REAR QUARTER

Filed Aug. 12, 1949 2 Sheets-Sheet 2

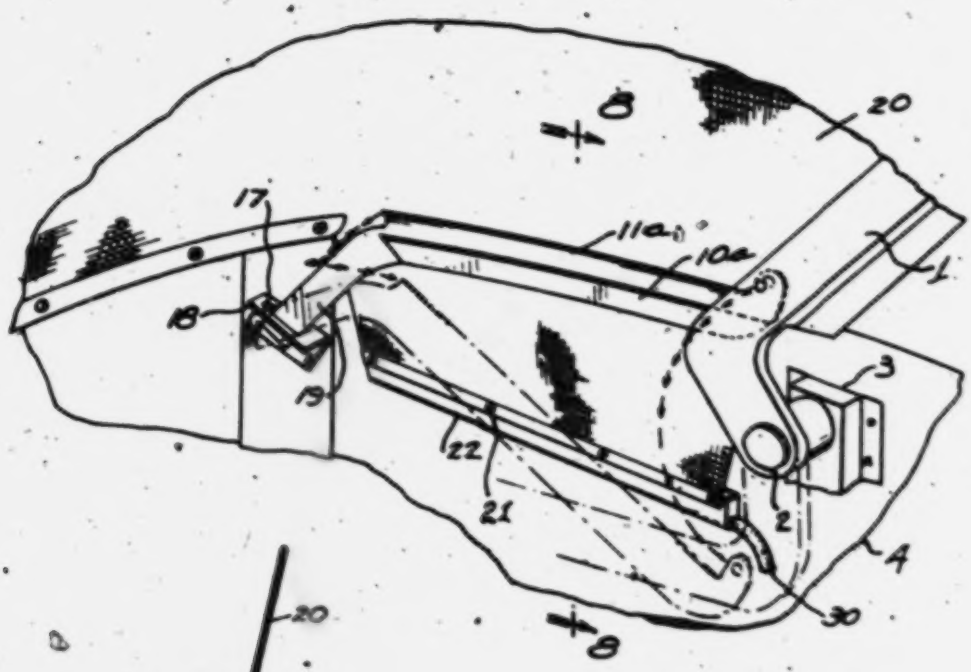

Fig. 7.

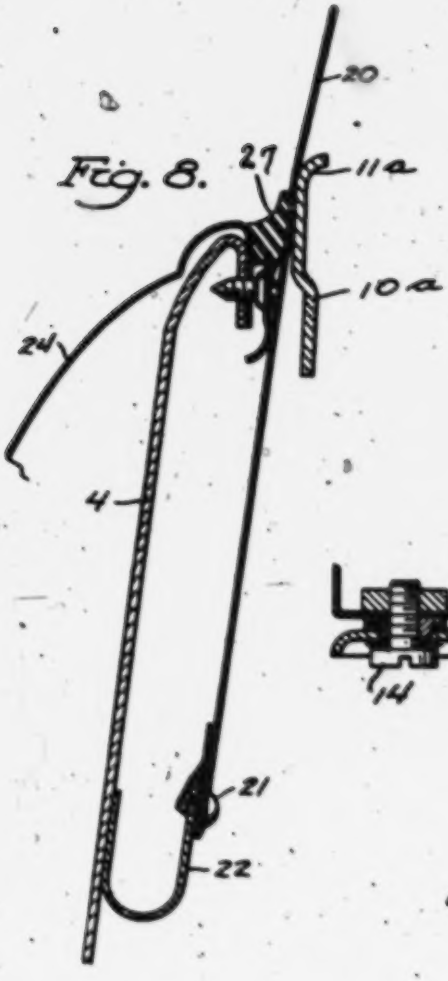

Fig. 8.

Fig. 6.

INVENTORS
Harry A. Mackie &
Stanley Duluk

By Barnes, Kisselle, Langlois & Raisch
Attorneys

Patented Oct. 2, 1951

2,569,724

UNITED STATES PATENT OFFICE

2,569,724

CONVERTIBLE FOLDING TOP WITH AUTOMATIC SEAL AT REAR QUARTER

Harry A. Mackie, Birmingham, and Stanley Dulak, Dearborn, Mich., assignors to General Motors Corporation, Detroit, Mich., a corporation of Delaware

Application August 12, 1949, Serial No. 109,974

10 Claims. (Cl. 296—107)

1

This invention relates to automatic sealing for a convertible top. Convertible tops are now fastened along the rear edge permanently to the body or tonneau. At the sides, just to the rear of the rear side window, the fabric has to be releasably fastened to the top of the body or tonneau by means of releasable fastening means. This fastening means may take the form of an inverted dovetail channel strip fastened to the top of the tonneau and extending longitudinally of the body. The foldable top has a stiff flap sewed on the inside. When the top is up this flap has to be tucked under the inverted channel. This has to be done by hand and is quite a chore as very often after the top has been in use for some time it is hard to stretch the top material and hook the flap under the channel. Another form of fastening the top material to the top of the tonneau at the rear quarter is to use a plurality of metal channel strips in which fasteners or studs on the inside of the top may be snapped in place, and the studs will slide out the ends of the channels when the top is folded down. This snapping the fasteners in the channels has to be done by hand after the top is raised. In both these arrangements the top material is automatically disengaged when the top is folded down. However both of these arrangements have the disadvantage that each time the top is raised the top material should be fastened in place at the sides when it has been released and this has to be done by hand. Furthermore the car can never be reliably locked because the top material may be easily pulled away from the top of the tonneau and the arm reached into the body to open the door.

It is the object of our invention to provide an automatic fastening and sealing means at the top and sides of the tonneau of the convertible. This fastening means never has to be operated or touched by the driver of the car. When the top is raised the device automatically goes into action and binds the top material against a sealing strip that is fastened to the top and sides of

2

Referring to the drawings:

Fig. 1 is a fragmentary perspective of the inside of the convertible adjacent the rear seat.

Figs. 2, 3, and 6 are sections on the corresponding section lines of Fig. 1.

Figs. 4 and 5 are sections on the corresponding sections lines of Fig. 3.

Fig. 7 is a fragmentary perspective of the inside of a convertible adjacent the rear seat, showing another form of our invention.

Fig. 8 is a section on the line 8—8 of Fig. 7.

1 is the main bow of the folding top which is ordinarily raised and lowered by a power, usually a hydraulic or electric motor. Inasmuch as our improvement would work with a folding top that is raised and lowered by hand power, it is thought unnecessary to show the power means which is no part of the invention.

The main bow 1 is pivoted on a fulcrum pin 2 which is fastened to an anchor 3 which comprises a flanged stamping spot welded to the inside of the folding top compartment panel 4. The main bow has a sheet metal elbow 5 pivoted to it by means of the stud 6. The elbow with an interposed spring lock washer 7 engages over a spherical washer 8. This elbow 5 is fastened through the slots 9 to the toggle arm 10, which has a stamped out longitudinally extending boss 11. Toggle arm 10 is pivoted at the knee by pin 12 to toggle arm 13 which is pivoted by stud 14 to the bracket 15, which in turn is welded to the inside of the tonneau panel. The screws 16 and the slots 9 allow the elbow 5 to be adjusted slightly along the end of the toggle arm 10.

In the form of the structure shown in Fig. 7 the toggle arms are replaced by a single wiping arm 10a which has punched out wiping boss 11a. This wiping arm 10a instead of being guided in its movement by means of the toggle arm 13, as in Fig. 1, is guided by a slot 17 in the bracket 18. The wiping arm 10a has a turned down portion 19 that passes through the slot 17 in the bracket 18 and thereby guides the rear end of the wiping

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strip 26 and the belt molding 23 as plainly shown in Fig. 2.

When the top folds down, the entire top material provided by the section 24 of the top which is below the belt line fastened to the rain trough 22, drops down into the folding top compartment or well. When the top is raised by raising the main bow 1 and the other connected bows (not shown) the material is stretched as shown in Figs. 2 and 3. In the construction shown in Fig. 1, the toggle arms fold up to the near straight line position and the wiping arm 16, with its struck out bow 11, wipes against the top material 24, pressing this firmly against the in-leaning fin of the weather strip, pressing that fin outwardly as shown in both Figs. 2 and 3. This firmly holds the top material against the sealing weather strip 27 and provides a very good fastening means at the top of the tonneau in place of the channel type of fastener described in the preamble. Furthermore, it gives a reliable weather seal by means of pressing the top material 24 tightly against the rubber weather strip. If any water does seep through the connection at this point, it runs down and is caught in the rain trough 22 and is discharged at a separate point by means of the rubber tube 32. A reinforcing material 28 is sewed to the flexible top material to take the rubbing action.

In the form of the invention shown in Figs. 1–6, panels 4 and 24 with their turned over upper edges, together with belt molding 23, form the "belt rail." In the form of the invention shown in Figs. 7 and 8, the turned over edges of panels 4 and 24 form the "belt rail."

What we claim is:

1. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and supported by said panel on the inside and considerably below the top of the metal body or tonneau, a sealing strip of rubber with a leaning-in rubber fin secured to the top of the side of the tonneau at the belt line and arranged to engage the outside of the folding top material when the top is raised, and a wiping arm secured to a bow and operating so that the wiping arm is caused to wipe the inside lower portion of the top material in raising the top and press the top material against the inside of the sealing strip when the top is raised.

2. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported on the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and supported by said panel on the inside and considerably below the top of the

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structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and supported by said panel on the inside and below the top of the metal body or tonneau, said top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, and an arm secured to a bow and operable simultaneously with the bow to engage the inside lower portion of the top material in raising the folding bow structure and produce a weather seal between the top material and the top of the side of the tonneau.

4. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and fastened to said panel on the inside and below the top of the metal body or tonneau, a portion of said top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, a wiping arm attached at one end to a bow and means at the other end of the arm to guide it so that it is caused to wipe the inside lower portion of the top material in raising the top to seal the joint of the top material with the adjoining top of the tonneau.

5. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and secured to said panel on the inside and below the top of the metal body or tonneau, said top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, a wiping arm pivoted to a bow, and a guide for the rear end of the wiping arm whereby the wiping arm is caused to wipe the inside lower portion of the top material in raising the top to engage the top material and urge it toward the adjoining portion of the tonneau and thereby provide a watertight seal between said top material and said tonneau.

6. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and secured to said panel on the inside and below the top of the metal body or tonneau, said flexible top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, a wiping arm attached to a bow and caused to wipe the inside lower portion of the top material and grip

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flexible top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, a wiping arm pivoted to a bow and caused to engage the top material when the top is raised to weather seal the joint between the two said adjoining elements, and means for guiding the rear end of the wiping arm comprising a swinging link or toggle arm pivoted to the rear end of the wiping arm and to the tonneau.

8. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down, a rain trough secured to the bottom of said flexible top material and to said panel on the inside and below the top of the metal body or tonneau, said flexible top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, and a wiping arm secured to a part of the movable bow structure and acting simultaneously with said bow structure to engage the inside lower portion of the top material in raising the top to press the two adjoining members toward each other and thereby produce a weather seal therebetween.

9. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and secured to said panel on the inside and below the top of the metal body or tonneau, said top material spreading and adjoining the top of the side of the tonneau when the bow

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structure is raised, and a wiping arm provided with a punched out wiping boss attached to a part of the bow structure and guided at its other end to cause it to wipe the top material in raising the top and seal the joint between the top material and the top of the tonneau.

10. In a convertible automobile body, a fixed side wall member having at the top a belt rail, a swinging main bow mounted on said wall member, a collapsible top movable with the bow between raised and lowered positions and including at the rear quarter foldable top material fastened at its lower end to the side wall member below the belt rail and arranged when the bow is raised to extend upwardly beside the belt rail and beyond the same, a deformable element effective to afford a weatherproof seal positioned between the adjoining surfaces of the belt rail and the foldable top material when the bow is raised, and a pressure arm movably connected with the bow for cooperative relation with the belt rail to squeeze the deformable element therebetween for a tight joint.

HARRY A. MACKIE.
STANLEY DULUK.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,809,506	Campbell	June 9, 1931

FOREIGN PATENTS

Number	Country	Date
564,361	Great Britain	Sept. 25, 1944

serted in the slot 32 through an enlarged portion 27 thereof adjacent the windshield header 14.

Inasmuch as the transverse supporting ribs 33 may be connected to form a radio antenna, as by lead wire 38 soldered thereto, suitable insulating material 39 may be secured to the sides of the retainers 36 and formed to provide grooves to receive metal channels 41 which in turn slidably cooperate with the tracks 35.

When the top is in raised position, the transverse supporting ribs 33 are maintained in proper spaced relation by a series of longitudinally extending web straps 43 suitably secured as by rivets 44 to each of the transverse ribs 33 and to a forward transverse top header 46 as at 47, and secured at their opposite ends, with the rear edge of the top fabric 18, to the rear deck of the body adjacent the top well 28, as at 28. When the top is in raised position, some of the spacer straps 43 being secured adjacent the ends of the transverse supporting ribs 33 and being secured between the vehicle body at the rear and the top header 46 at their forward ends, the spacer straps are pulled tightly to exert pressure on the ends of the bowed ribs 33 springing them slightly inwardly. The top fabric may be fitted

window frames 16 beyond the outer peripheries thereof and resiliant shields 62 are secured to the fabric and extend over the window frames 16 to the interior of the passenger compartment, a strip of yieldable fabric 63 extending between the fabric top and the shield closely engaging the window frame 16.

For closing the top well 28 when the top is in folded position, a cover 70 may be fixed at its forward edge adjacent the forward edge of the top well and extend across the well to be removably secured at 28.

In operation, assuming the top to be in lowered position, the well cover 70 is unsnapped and the operator grasps the top header 46 sliding it along the supporting rail 23 to the windshield header 14 where the forward edge thereof engages the sealing molding 48. As the top header 46 moves forwardly, it carries with it the top fabric 18, the transverse supporting ribs 33 and the spacer straps 43. The thumb screws 52 between the headers 14 and 46 and the snap fastener connections 58—59 between the top side panels 20 and the body may be completed by the operator at his leisure from within the passenger compartment. The top may be lowered by simply

top material around the rearward ... sides when it has been released and this has to be done by hand. Furthermore the car can never be reliably locked because the top material may be easily pulled away from the top of the tonneau and the arm reached into the body to open the door.

It is the object of our invention to provide an automatic fastening and sealing means at the top and sides of the tonneau of the convertible. This fastening means never has to be operated or touched by the driver of the car. When the top is raised the device automatically goes into action and binds the top material against a sealing strip that is fastened to the top and sides of the tonneau. Hence three advantages are derived from this structure over what has been the prevailing practice. First, the device is automatic in its operation and requires no human interposition. Second, the device weatherseals as well as fastens the material to the top of the tonneau in a way that is not afforded by previous structures, and third, the material is locked in place so that it is not possible to release it to reach into the interior of the car to unlatch the doors.

12 to toggle arm 13 which is pivoted by stud 14 to the bracket 15, which in turn is welded to the inside of the tonneau panel. The screws 16 and the slots 9 allow the elbow 5 to be adjusted slightly along the end of the toggle arm 13.

In the form of the structure shown in Fig. 7 the toggle arms are replaced by a single wiping arm 18a which has punched out wiping boss 11a. This wiping arm 18a instead of being guided in its movement by means of the toggle arm 13, as in Fig. 1, is guided by a slot 17 in the bracket 18. The wiping arm 18a has a turned down portion 19 that passes through the slot 17 in the bracket 18 and thereby guides the rear end of the wiping arm when it is thrown up or down—the latter position shown in dotted lines in Fig. 7.

The top fabric or material 20 is permanently fastened by rivets 21 to the rain trough 22 which in turn is spot welded to the folding top compartment panel 4. Belt molding 23 loops over the top of the rear quarter panel 24, and this and a retaining strip 25 are fastened to the looped under top edge of the folding top compartment panel 4 by means of the screws 26. The finned weatherstrip 27 is held in between the retaining

of the side of the tonneau at the belt line and arranged to engage the outside of the folding top material when the top is raised, and a wiping arm secured to a bow and operating so that the wiping arm is caused to wipe the inside lower portion of the top material in raising the top and press the top material against the inside of the sealing strip when the top is raised.

2. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported on the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and supported by said panel on the inside and considerably below the top of the metal body or tonneau, a sealing strip secured to the top of the side of the tonneau at the belt line and arranged to engage the outside of the folding top material when the top is raised, a swinging wiping arm pivoted to and actuated by part of the bow structure, and means for guiding the arm so that it is caused to wipe the inside lower portion of the top material in raising the top and press the top material against the inside of the sealing strip when the top is raised.

3. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and secured to said panel on the inside and below the top of the metal body or tonneau, said flexible top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, a wiping arm attached to a bow and caused to wipe the inside lower portion of the top material and grip the top material when the top is raised, and means for guiding the rear end of the wiping arm comprising a slotted bracket secured to the tonneau and through which the rear end of the wiping arm passes.

4. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and secured to said panel on the inside and below the top of the metal body or tonneau, said flexible top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, a wiping arm attached to a bow and caused to wipe the inside lower portion of the top material and grip the top material when the top is raised, and means for guiding the rear end of the wiping arm comprising a slotted bracket secured to the tonneau and through which the rear end of the wiping arm passes, said bracket having a portion to engage the inside of the tonneau and a portion to engage the outside of the tonneau.

5. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and secured to said panel on the inside and below the top of the metal body or tonneau, said flexible top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, a wiping arm attached to a bow and caused to wipe the inside lower portion of the top material and grip the top material when the top is raised, and means for guiding the rear end of the wiping arm comprising a slotted bracket secured to the tonneau and through which the rear end of the wiping arm passes, said bracket having a portion to engage the inside of the tonneau and a portion to engage the outside of the tonneau and arranged to wipe the top material against the adjoining portion of the tonneau and thereby provide a watertight seal between said top material and said tonneau.

6. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and secured to said panel on the inside and below the top of the metal body or tonneau, said flexible top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, a wiping arm attached to a bow and caused to wipe the inside lower portion of the top material and grip the top material when the top is raised, and means for guiding the rear end of the wiping arm comprising a slotted bracket secured to the tonneau and through which the rear end of the wiping arm passes.

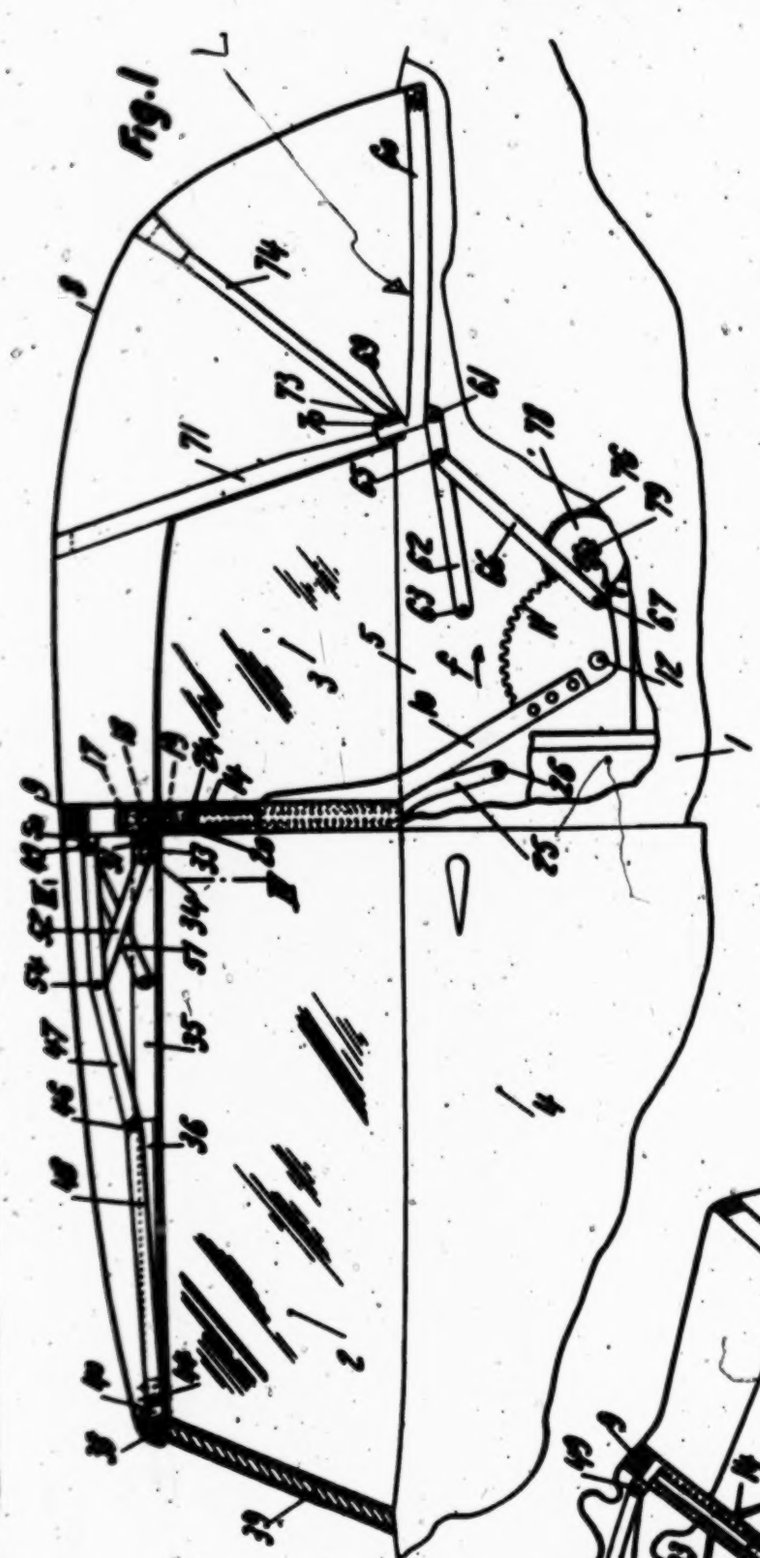
7. In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down and secured to said panel on the inside and below the top of the metal body or tonneau, said

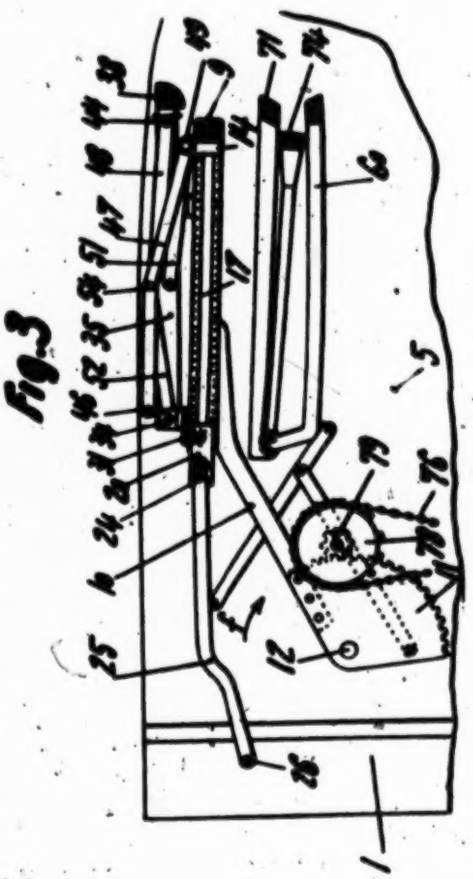
DEFENDANTS' EXHIBIT NN

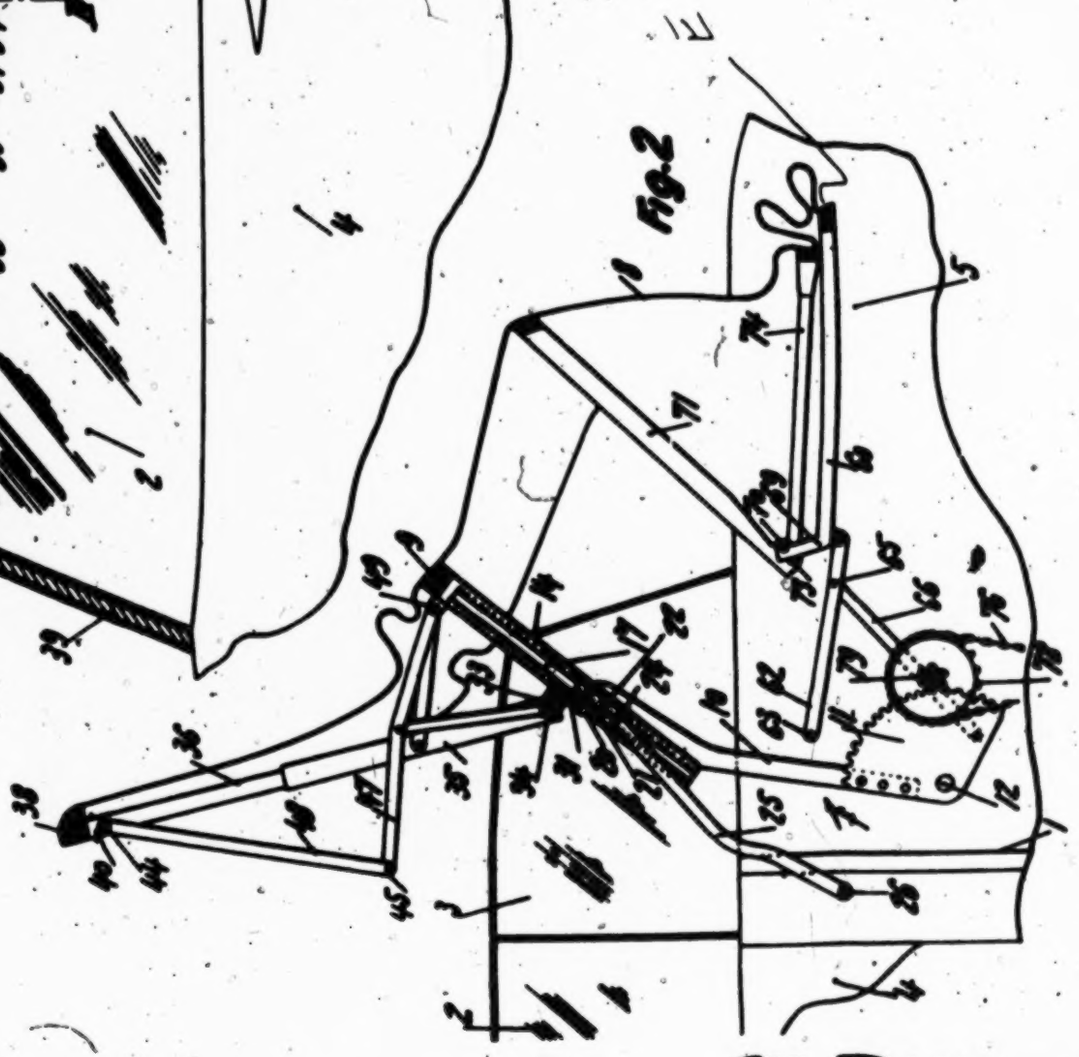
May 9, 1939. M. BESSONNEAU 2,157,783

FOLDING HOOD FOR AUTOMOBILE VEHICLES OR THE LIKE

Filed Nov. 16, 1938 3 Sheets-Sheet 1







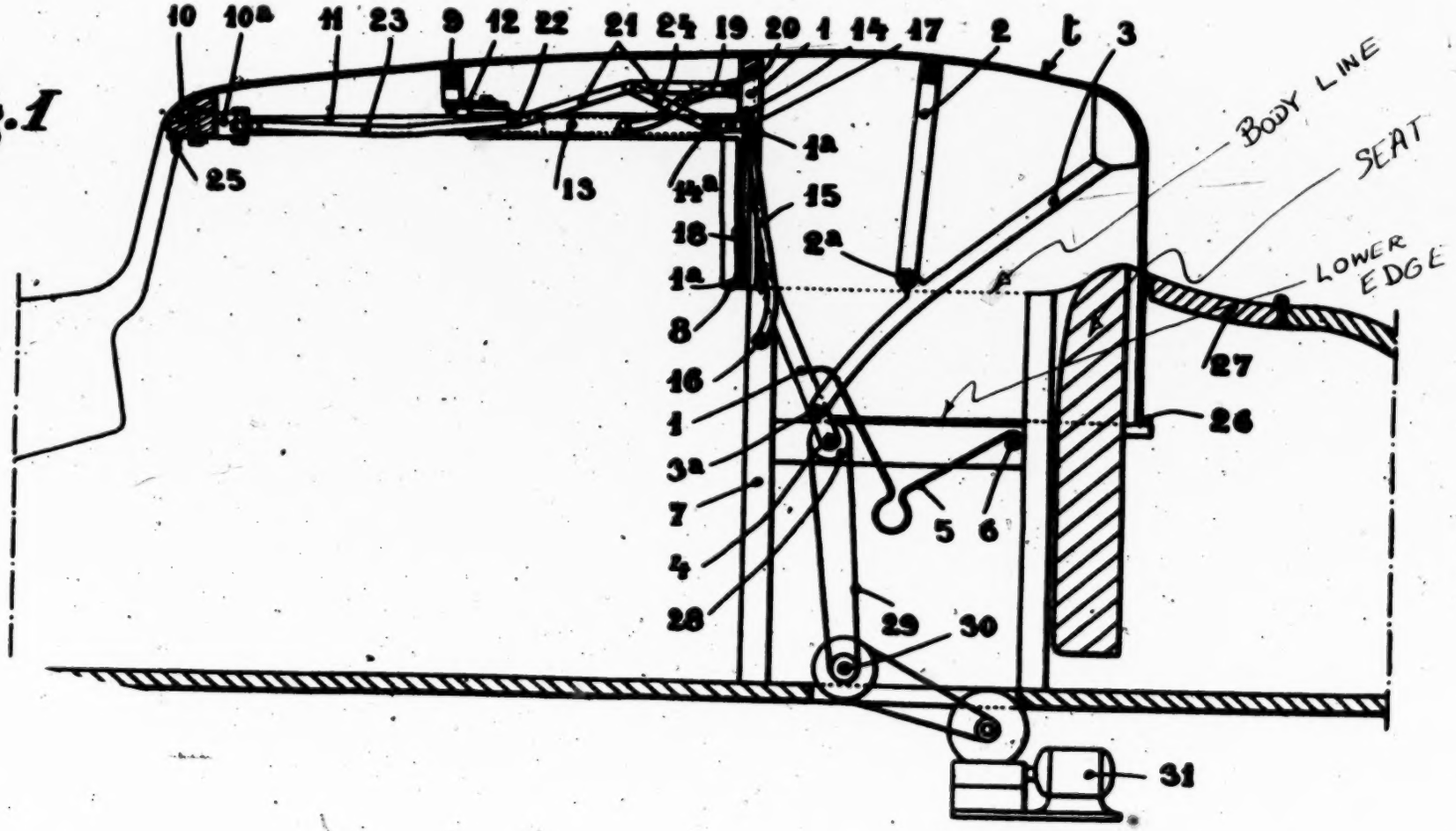
M. Bessonneau
Inventor

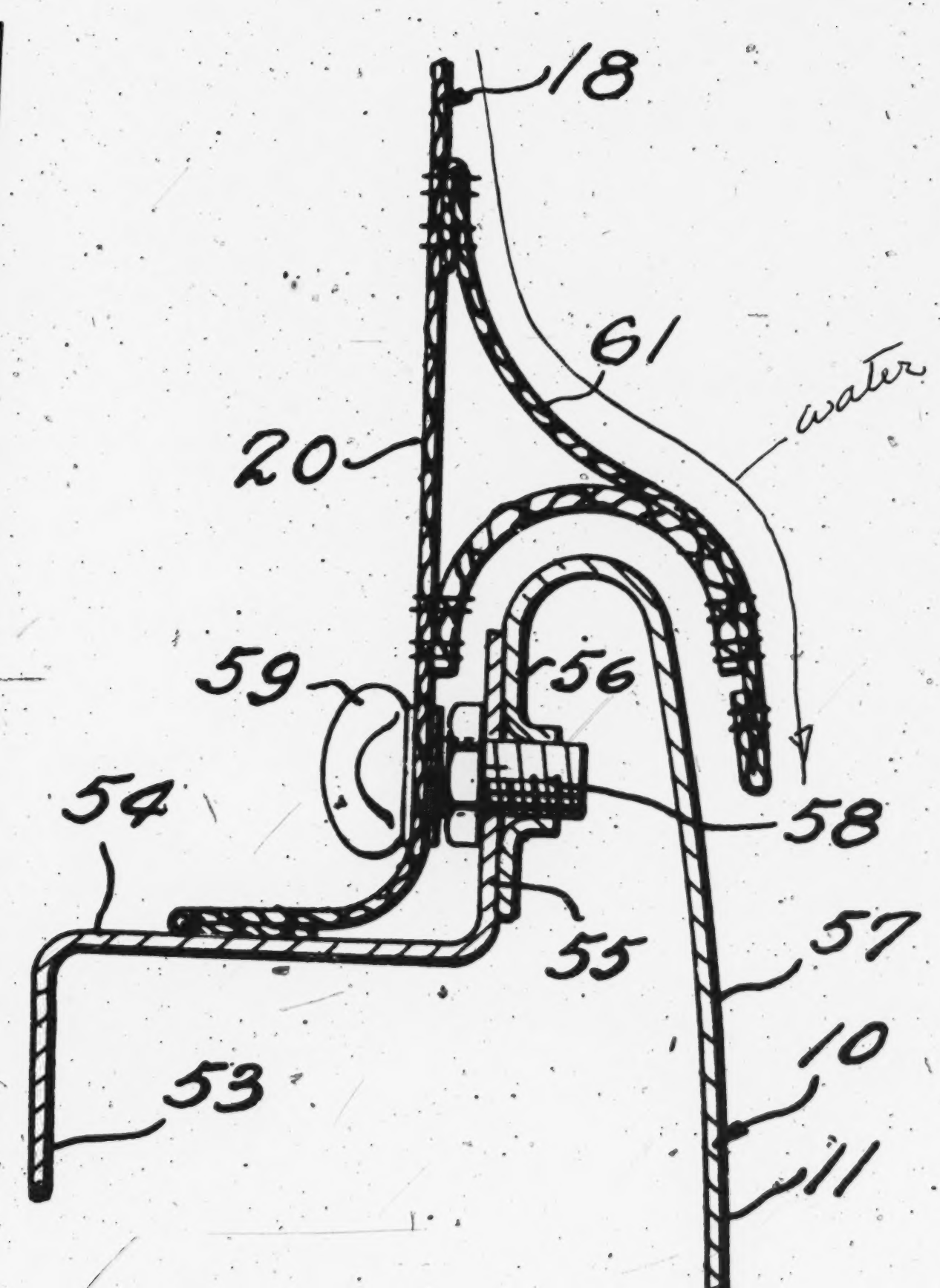
By: Glascock Downing & Seibold
Attys.

7,641 COMPLETE SPECIFICATION

OO
57-357

Fig. 1

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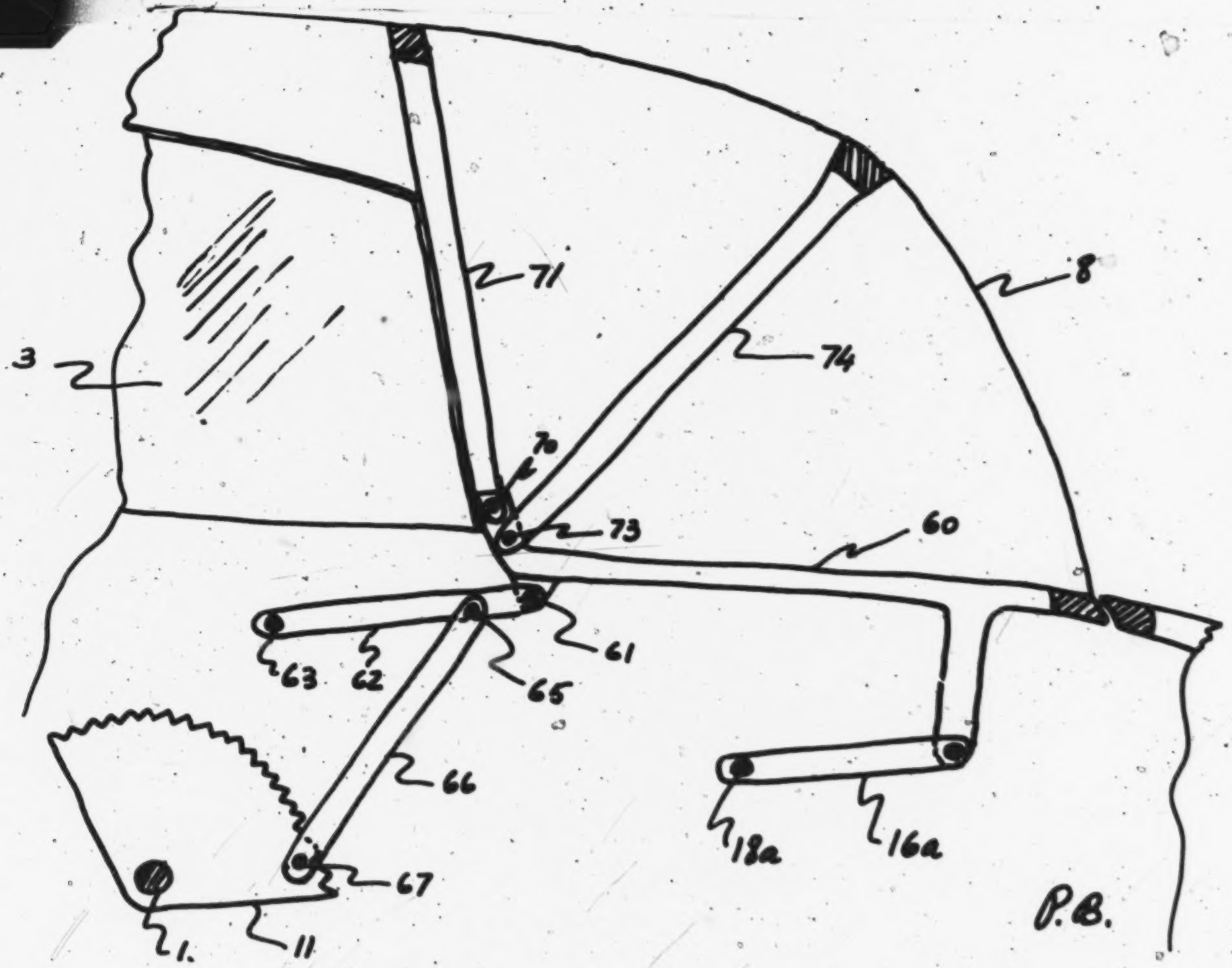
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WRIGHT DEPOSITION EXHIBIT 4

LICENSE AGREEMENT

This agreement is effective on the day of the last signature hereto, between AUTOMOBILE BODY RESEARCH CORP. (hereinafter referred to as AB), a corporation of Maryland, and ATLAS INTERNATIONAL Co. of Chicago, a partnership, located at 1545 N. Fairfield Avenue, Chicago, Illinois (hereinafter referred to as Licensee).

WHEREAS, AB is the owner of United States Letters Patent 2,549,153, together with all rights for past infringement thereof, and United States Letters Patent 2,569,724, together with all rights for past infringement thereof since December 31, 1953; and

WHEREAS, Licensee desires a release for past infringement of said patents and a license for the future;

NOW, THEREFORE, the parties agree as follows:

1. AB licenses the Licensee to make, sell, and use devices under its United States Patents Nos. 2,549,153 and 2,569,724.

2. Licensee will pay a royalty on any replacement top (made, used or sold by Licensee), without regard to whether such top is covered by either of said patents, which by its peculiar shape or other construction adapts it for use on any one or more of the following cars:

a. Buick	1950 to 1955 inclusive
b. Cadillac	1950 to 1955 inclusive
c. Chevrolet	1950 to 1954 inclusive
d. Chrysler	1953
e. De Soto	1953
f. Dodge	1953
g. Ford	1952 to 1954 inclusive
h. Lincoln	1952 to 1955 inclusive
i. Mercury	1952 to 1954 inclusive

j. Oldsmobile 1950 to 1955 inclusive
k. Plymouth 1953
l. Pontiac 1950 to 1954 inclusive
m. Any model of car after the 1955 model where the manufacturer of the car marks one or more of the above patent numbers on new cars of that model or pays royalty on the replacement top fabrics that it sells for that model.

3. In event Licensee makes, uses or sells any device (including replacement tops) not falling under the preceding paragraph, royalty is to be paid if the Licensee's conduct respecting such device would, in the absence of the patentee's consent, amount to an infringement (including contributory) of one or more of said patents. In determining the coverage of either patent, its claims read in the light of its specification, and the prior art of record in its file wrapper shall measure the scope of the patent.

4. In event Licensee sells its products through another person, firm, company or corporation (to members of the public, wholesalers, stores, dealers, or other customers), and if such other person, firm, company or corporation, is owned, managed, or controlled by any person or persons, firm, company or corporation, that manage or control Licensee, or by a relative (either by blood or marriage) of the person or persons who control Licensee, the royalty base shall be the highest sale price of any of the persons, firms, companies, or corporations involved. This provision is included in this agreement since it is the practice of some members of the replacement top industry to have separate concerns for manufacturing and selling, whereas it is the practice of other members of the industry to have a single concern for both manufacturing and selling. This provision is intended to equalize the royalties.

5. If the number of licensed devices sold in any quarter

is less than 400, the royalty shall be at the rate of 5%. If over 400 licensed devices are sold in any one quarter, the royalty is computed by aggregating the selling prices (using the base price for each unit as determined by the preceding paragraph), and dividing by the number of devices sold to ascertain the average selling base price. The royalty shall be 5% of this average base price for each of the first 400 devices sold and 3% of this average base price for each device sold in excess of 400. Thus, if Licensee sold 400 devices for $15.00 and 400 at $25.00 during a given quarter, the total royalty would be $640.00. In event devices are leased or used without being sold, royalty will be paid using the average selling price as a base. For the purposes of this agreement, the selling price of a licensed device shall be the invoice price to a customer including excise taxes but less freight allowances and discounts; and less 25% of the invoice price as an allowance for the rear curtain in the case of tops sold with rear curtains and less than $1.25 as an allowance for trim in the case of tops sold with trim, provided that in no case shall the royalty be based on a selling price of a replacement top alone be less than 75% of the selling price of the same top complete with rear curtain. A device shall be considered sold when it is invoiced, provided that Licensee shall be entitled to credit for returned devices and for devices written off as bad debts.

6. In order to enable AB to keep count of the number of replacement tops sold by the Licensee, AB will furnish Licensee with serially numbered printed patent notices. There will be three forms of notices respectively reading as follows:

(a) "This replacement top licensed under U. S. Patent No. 2,549,153."

(b) "This replacement top licensed under U. S. Patent No. 2,569,724."

(c) "This replacement top licensed under U. S. Patents 2,549,153 and 2,569,724."

Licensee will attach the appropriate one of these notices, as specified by AB, to each replacement top covered by a patent, and will be responsible for each serially numbered notice furnished to it, and must pay royalty on at least as many replacement tops as it has received notices that remain unaccounted for by use, inventory, returns, bad debts or accidental destruction, plus royalty on any devices sold without such notice but on which royalty is due.

7. Royalty reports will be rendered quarterly during the months of January, April, July and October, covering Licensee's activities during the preceding quarters. For example, the April report will cover sales made from January 1, to March 31. Each royalty report will include:

(a) The total number of licensed devices sold and the total selling price thereof.

(b) The number of licensed devices leased or used but not sold.

(c) The report for the last quarter of each year shall additionally include the number of serially numbered patent notices received during the year and the number unused, remaining in inventory, on returned devices and accounted for by bad debts or accidental destruction.

Licensee shall pay to AB the amount of royalty shown to be due by each report within thirty (30) days of the date of the report.

8. Licensee agrees to keep adequate accurate records that will enable AB to determine the royalty due hereunder and to allow a representative of AB to audit the same at least once a year. The records are to be preserved for a period equal to the statute of limitations in Licensee's state.

9. In event Licensee sells to a third party who is also a licensee of AB, the present license agreement shall not apply nor will royalties be payable hereunder, and nothing herein shall constitute a waiver of AB's right to recover royalties from said third party under its license.

10. In event the parties have a dispute over the amount of unpaid royalty due to AB, either may call upon the Chief Judge of the U. S. District Court, for Maryland to appoint an arbitrator whose decision shall be binding.

11. Licensee agrees to report and pay AB for any royalty due for devices sold between the effective date of this agreement and the date of the last signature hereto within thirty days following the latter date.

12. In consideration of $1.00, payable by Licensee to AB within sixty (60) days from the date hereof, AB releases Licensee and its customers of any claim for infringement arising prior to the effective date of this agreement, provided that this agreement shall run continuously for at least one year and royalties be fully paid thereunder.

13. So long as Licensee renders full and accurate royalty reports and has made payments as they come due, it may terminate this agreement by giving written notice of termination concurrently with a timely royalty report and payment in which event the license will terminate with the end of the next royalty period.

14. In event Licensee adopts a selling procedure which is different from the selling procedures followed by other licensees of AB and which results in a lower effective royalty base for Licensee, then AB may require Licensee to pay such additional royalty as necessary to correct the inequality.

15. AB may terminate this license in event of a breach of the license terms, which is not corrected after thirty (30) days notice.

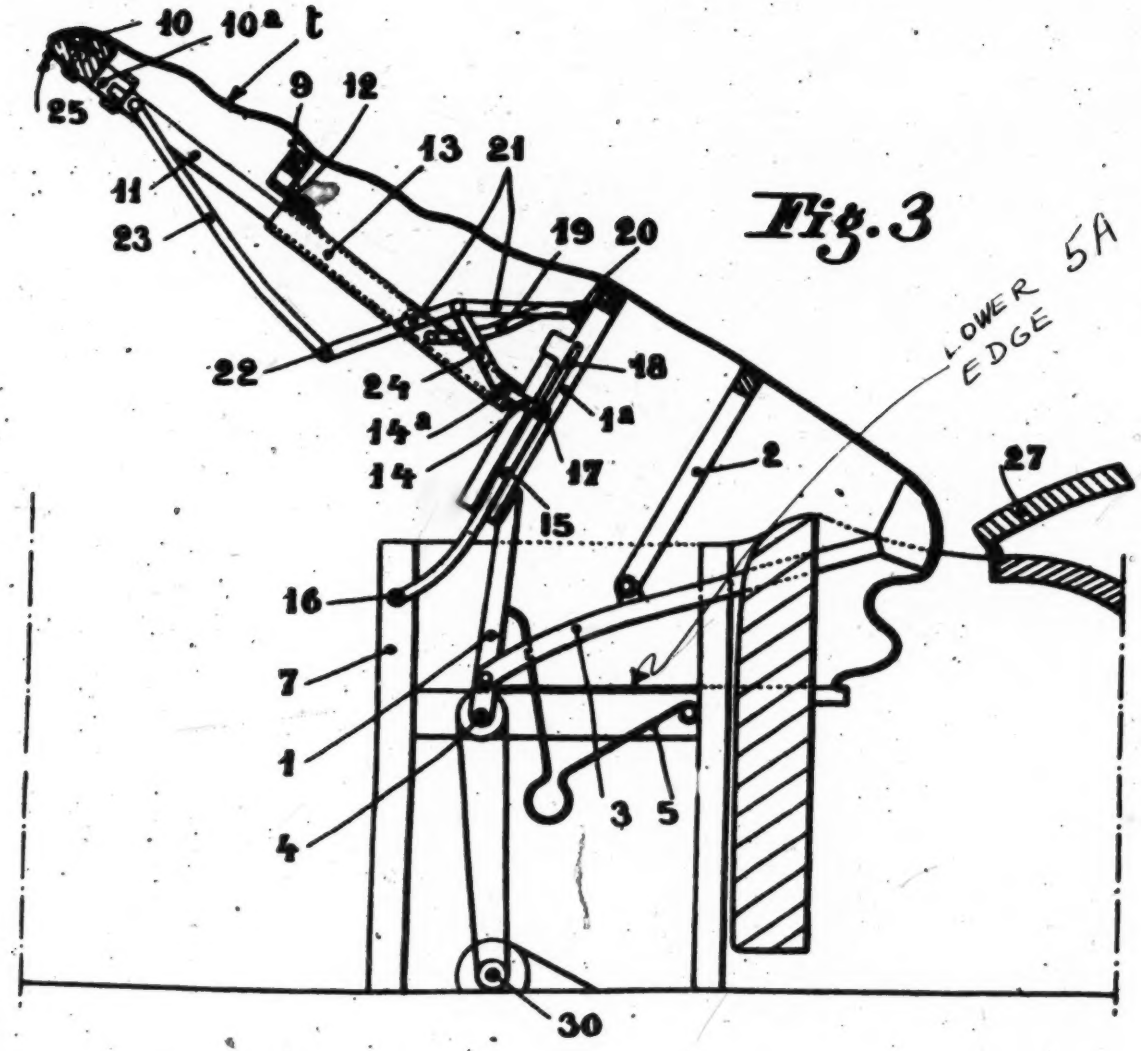
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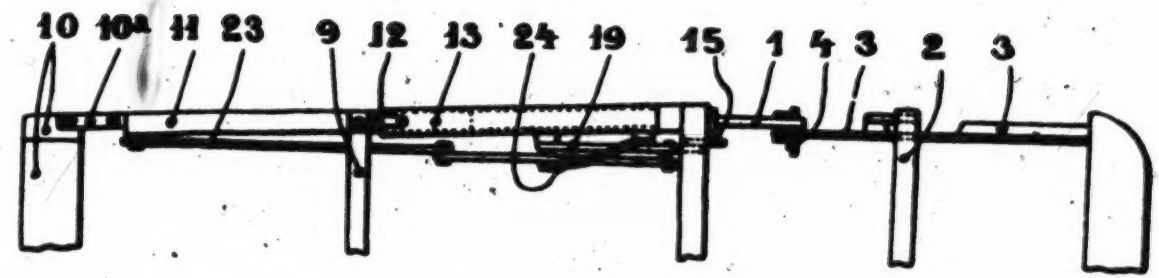
Fig. 3

Fig. 2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DEFENDANTS' EXHIBIT PP

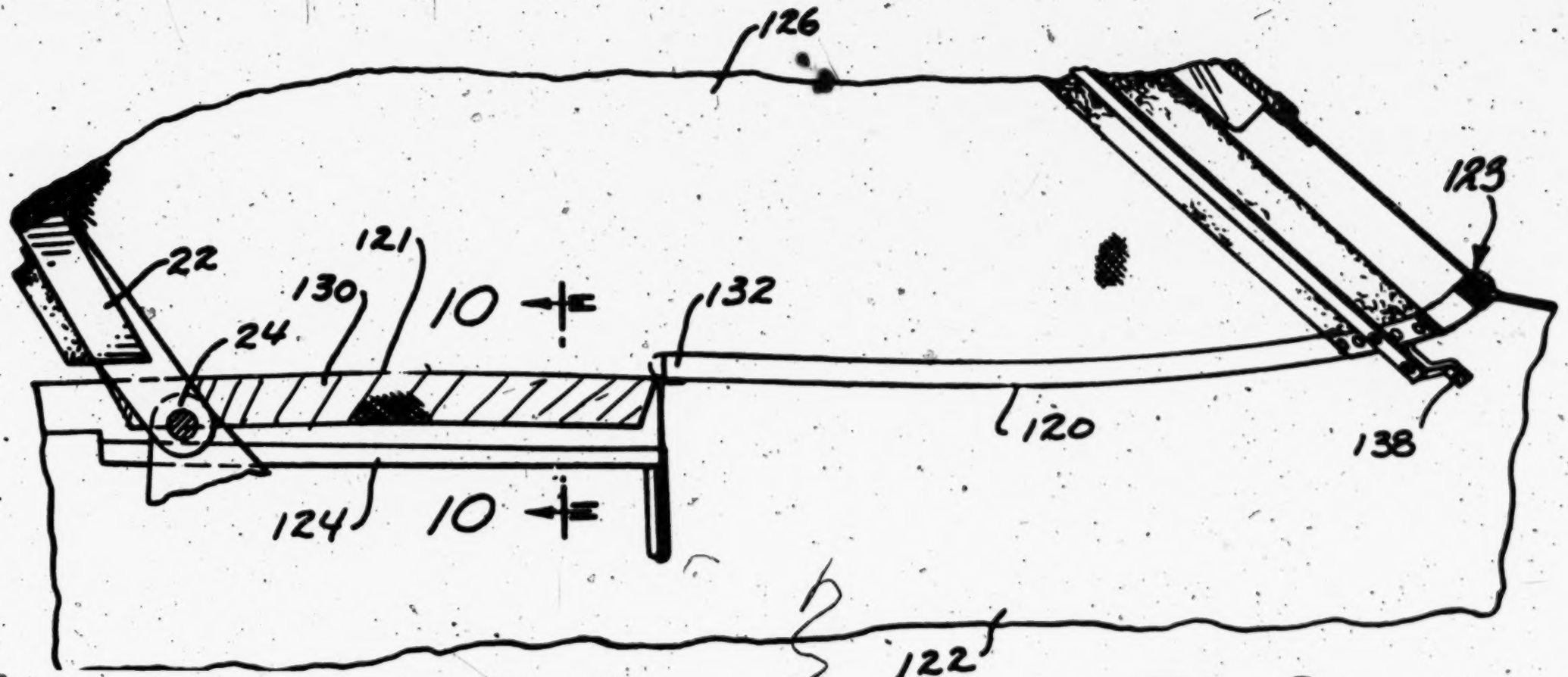
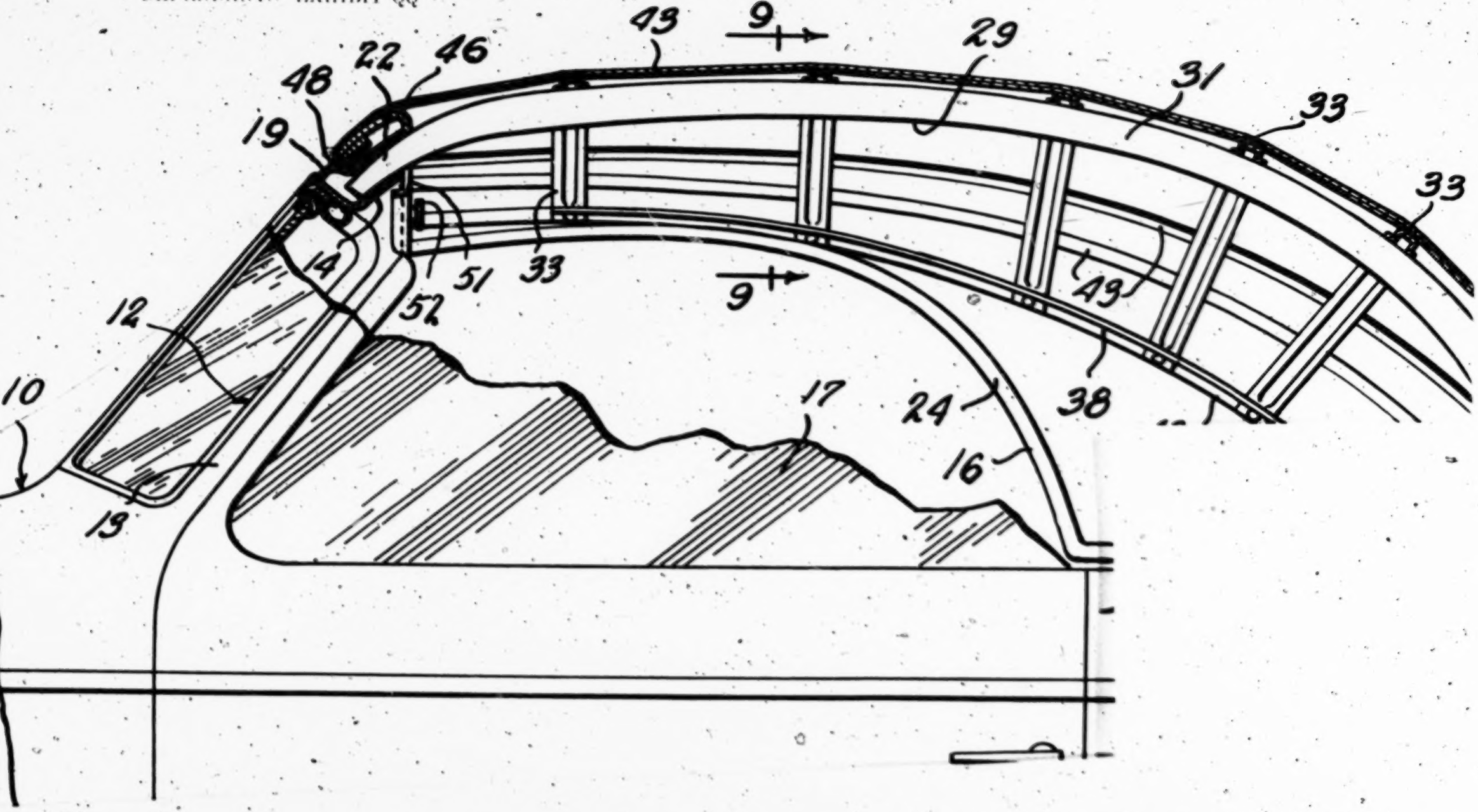
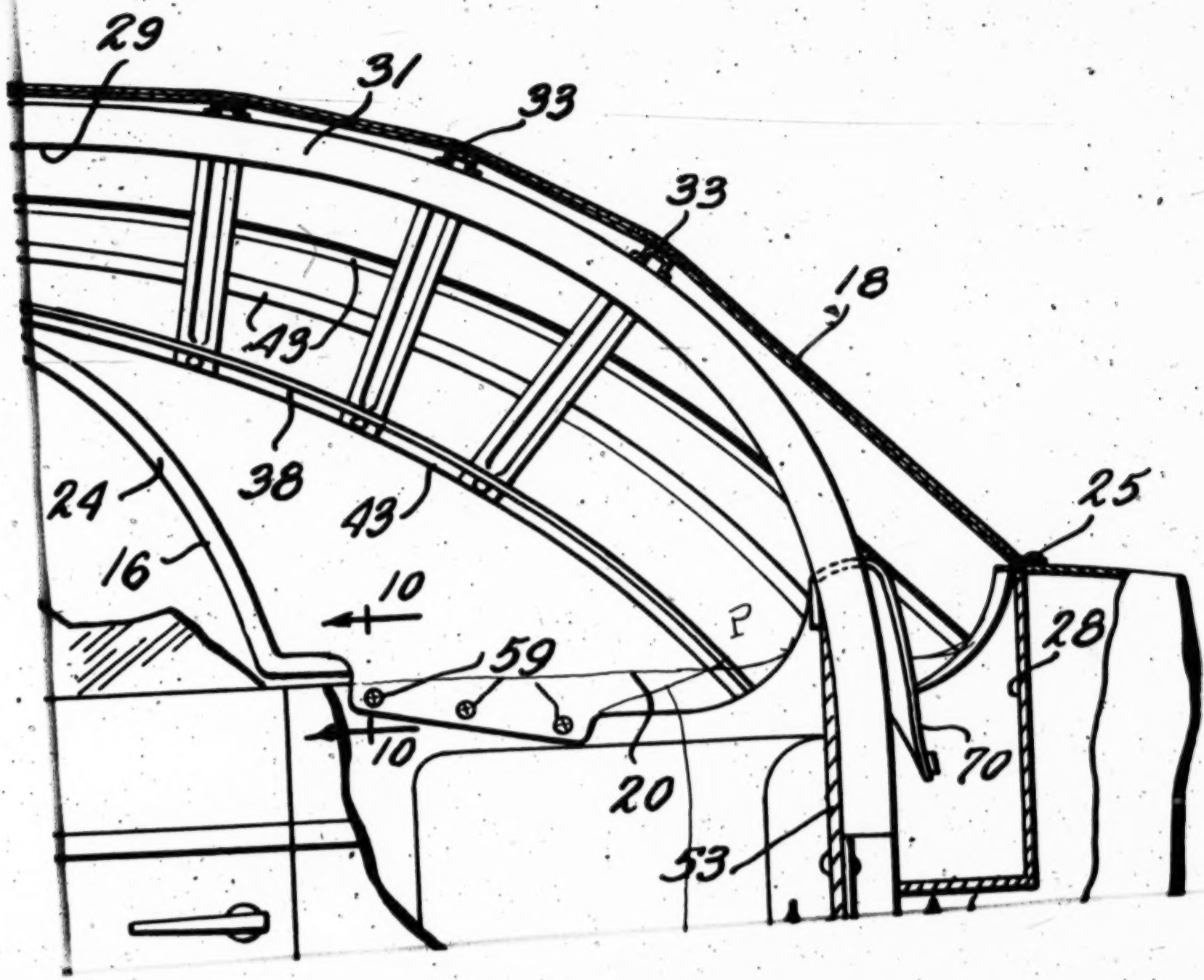


Fig. 9.

DEFENDANTS' EXHIBIT QQ

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9. In event Licensee sells to a third party who is also a licensee of AB, the present license agreement shall not apply nor will royalties be payable hereunder, and nothing herein shall constitute a waiver of AB's right to recover royalties from said third party under its license.

10. In event the parties have a dispute over the amount of unpaid royalty due to AB, either may call upon the Chief Judge of the U. S. District Court, for Maryland to appoint an arbitrator whose decision shall be binding.

11. Licensee agrees to report and pay AB for any royalty due for devices sold between the effective date of this agreement and the date of the last signature hereto within thirty days following the latter date.

12. In consideration of $1.00, payable by Licensee to AB within sixty (60) days from the date hereof, AB releases Licensee and its customers of any claim for infringement arising prior to the effective date of this agreement, provided that this agreement shall run continuously for at least one year and royalties be fully paid thereunder.

13. So long as Licensee renders full and accurate royalty reports and has made payments as they come due, it may terminate this agreement by giving written notice of termination concurrently with a timely royalty report and payment in which event the license will terminate with the end of the next royalty period.

14. In event Licensee adopts a selling procedure which is different from the selling procedures followed by other licensees of AB and which results in a lower effective royalty base for Licensee, then AB may require Licensee to pay such additional royalty as necessary to correct the inequality.

15. AB may terminate this license in event of a breach of the license terms, which is not corrected after thirty (30) days notice.

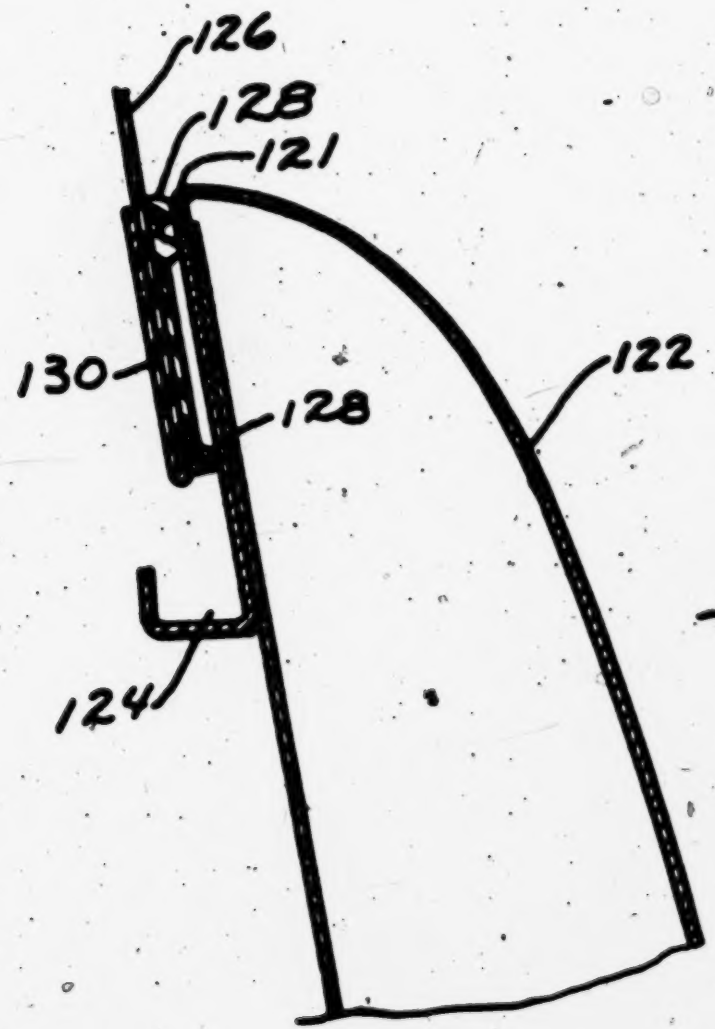
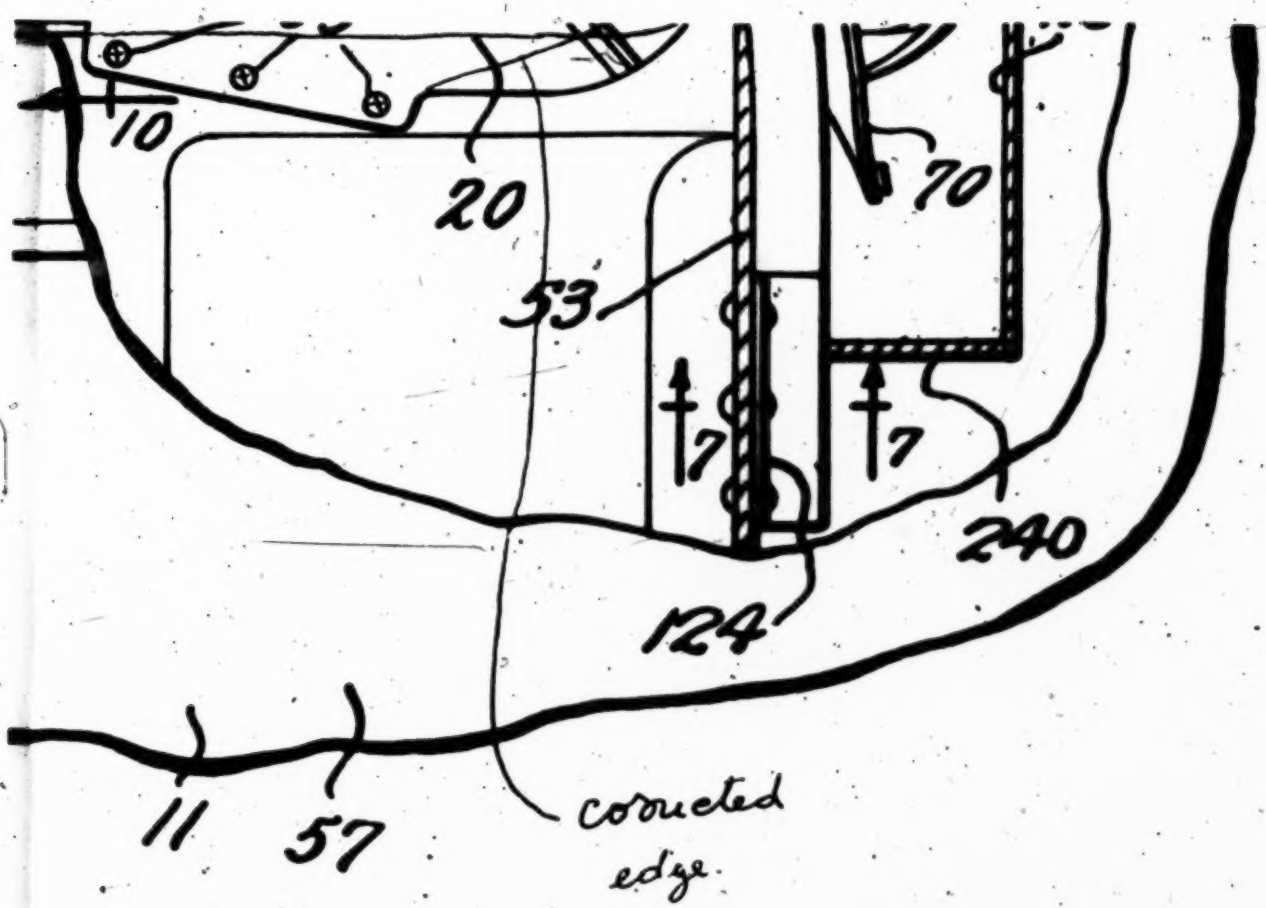


Fig. 10.

Fig. 3.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JAMES R. BROWNING, Clerk

Supreme Court of the United States

OCTOBER TERM, 1959

No. 582 21

ARO MANUFACTURING CO., INC., ET AL.,
PETITIONERS,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.,
RESPONDENT.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

DAVID WOLF
Counsel for Petitioners
68 Devonshire Street
Boston 9, Mass.

of Counsel,
CHARLES HIEKEN

Standard Printing Company, Boston, Mass. — Law Printers

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Supreme Court of the United States

OCTOBER TERM, 1959

No.

ARO MANUFACTURING CO., INC., ET AL.,
PETITIONERS,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.,
RESPONDENT.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

Petitioners, Aro Manufacturing Co., John R. Hamlin, George Shapiro, Harold Shapiro, Mae Shapiro and Marshall Shapiro pray that a writ of certiorari issue to review the judgment of the United States Court of Appeals for the First Circuit, entered in the above-entitled case on August 31, 1959.

Citations to Opinions Below

The opinion of the District Court (J.R.A. 33-41)[1] is reported in 119 U.S.P.Q. 122. The opinion of the Court of

[1] The printed materials filed in connection with this petition include two volumes of a Joint Record Appendix containing selected portions

Appeals, printed in Appendix B hereto, *infra*, p. 23, is reported in 270 F.2d 200, 122 U.S.P.Q. 536.

Jurisdiction

The judgment of the Court of Appeals was entered on August 31, 1959. (J.R.A. 635). A petition for rehearing filed September 9, 1959 was denied on September 15, 1959. *Ibid.* The jurisdiction of this Court is invoked under 28 U.S.C. Section 1254 (1).

Questions Presented

The Mackie-Duluk patent in suit relates to an improvement in automatic folding tops for convertible-type automobiles to minimize rain water leakage. Each claim to this improvement recites a combination of a convertible top fabric, supporting structures, and a mechanism for automatically effecting a seal of the fabric against the inside of the automobile body as the top is raised to prevent rain water from entering the interior of the automobile. The convertible top fabric alone is not claimed as an invention in the patent. The Petitioners make, sell and install only convertible top fabrics. The questions presented are:

1. Whether 35 U.S.C. Section 271 (c), which relates to contributory infringement, authorizes the patentee to prevent the sale of one unpatented though

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of the transcript of evidence and other materials in connection with the trial and appeal, including the opinions of the District Court and the Court of Appeals. This Joint Record Appendix is hereafter referred to as J.R.A. These materials also include the printed briefs filed in the court below. The briefs filed by petitioner are referred to as Brief for Appellants and Reply Brief for Appellants. The brief filed by Respondent is referred to as Brief for Appellee.

essential element, the convertible top fabric, of a patented combination when the fabric is especially cut and intended for use in the patented combination.

2. Whether Article I, Section 8 of the Constitution authorizes Congress to enact legislation granting the patentee the right to a limited monopoly over an unpatented component of a patented combination, when intended for use in the patented combination, the unpatented component itself not being an invention.

3. Whether the owner of a convertible automobile purchased from a manufacturer licensed under the patent for a combination infringes the patent by replacing a single worn element, the top fabric, with one made by a replacement top fabric manufacturer who does not pay royalties to the patentee.

4. Whether the patent is misused when the owner of two combination patents covering convertible automobile automatic folding tops assigns a territorial grant limited to Massachusetts under only the patent in suit to a newly-formed corporation just before the latter brings suit while the owner continues to receive royalties under both patents for the sale of fabrics which replace worn unpatented convertible top fabrics.

Constitutional Provision Involved

The Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries. U. S. Const. art. 1, § 8.

Statutory Provisions Involved

The statutory provisions involved are 35 U.S.C. Sections 103, 112 and 271 of the Patent Laws and 15 U.S.C. Sections 1-3, 7 and 15 of the Antitrust Laws. 69 Stat. 282 (1955), 26 Stat. 210 (1890), 38 Stat. 731 (1914). They are printed in Appendix A, *infra*, pp. 19-22.

Statement

The Mackie-Duluk Patent No. 2,569,724 in suit was issued on October 2, 1951 to General Motors Corporation. The patent relates to a convertible-type automobile folding top with an improved automatic sealing arrangement to minimize water leakage. Each claim in the patent is to a combination including, a folding bow structure supported on an automobile body, flexible top material supported by the folding bow structure and extending downwardly at the sides toward the rear inside the body where the lower edge of the flexible material is connected, and a wiping arm operatively connected to the folding bow structure so that the wiping arm presses the flexible material into sealing contact with the inside surface of the body as the top is raised. No claim in the patent covers the flexible top material alone. J.R.A. 589-95. General Motors Co. 1950-53 models and Ford Motor Co. 1952-54 models of convertible type automobiles include the improvement claimed in the Mackie-Duluk patent as original equipment. J.R.A. 24.

The flexible top material, or fabric, is usually replaced every three years or oftener; hence, the life of the fabric is several times less than the life of the car. J.R.A. 33. Car manufacturers themselves have little interest in either manufacturing or replacing fabric tops. Consequently, there has grown up a sizeable independent replacement top industry, of which Petitioners are in Massachusetts and per-

haps nationally, leaders. The Petitioners make, sell and install the fabric but do not manufacture, or install, any metal parts, components, or adjuncts. Unlike the fabric, all such metal parts normally last the life of the car. J.R.A. 34.

Respondent Convertible Top Replacement Co. acquired a Massachusetts territorial grant in the Mackie-Duluk patent ten days before bringing suit. J.R.A. 7. Automobile Body Research Corporation, the Respondent's assignor, retained the remaining rights in the Mackie-Duluk patent and also owned the Ackermans patent 2,549,154 (J.R.A. 567-78), also relating to convertible top assemblies, at the time this action commenced. Automobile Body had acquired the Ackermans patent (J.R.A. 617) shortly after being organized following a holding in a suit brought by Ackermans that General Motors was liable for infringing the Ackermans patent.[2]

Several transactions involving the transfer of rights under these patents followed. General Motors assigned the Mackie-Duluk Patent No. 2,569,724 to Automobile Body and retained a royalty free license under this patent. J.R.A. 509. General Motors also agreed to pay Automobile Body royalties under the Ackermans patent for the sale of replacement top fabrics. J.R.A. 31.

Automobile Body signed a license agreement with Ford Motor Co. on July 21, 1955 in which Ford agreed to pay $73,000 for past infringement. J.R.A. 511. Ford also agreed to pay royalties to Automobile Body under both the Ackermans and Mackie-Duluk patents for the sale of replacement top fabrics which "if sold without the patent owner's consent, would constitute contributory infringement ... under 35 United States Code, § 271." *Ibid.*

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[2] *Ackermans v. General Motors Corp.*, 202 F.2d 642 (4th Cir.), *cert. denied*, 345 U.S. 996 (1953) reversed the District Court's finding of lack of invention, 108 F. Supp. 368 (D. Md. 1952).

Later Automobile Body entered into a licensing agreement with Atlas International, a nationally prominent manufacturer of replacement top fabrics, in which Atlas was licensed under both the Ackermans and Mackie-Duluk patents to sell replacement top fabrics on condition that it pay a royalty on the sale of each replacement top for use in 1950-54 General Motors cars, 1952-54 Ford Motor Co. cars and 1953 Chrysler Corporation cars "without regard to whether such top is covered by either of said patents". J.R.A. 617.

Petitioner Aro Manufacturing Co. was first charged with contributory infringement of both patents in a letter dated January 2, 1954 from counsel for Automobile Body. J.R.A. 473. Petitioner Aro changed its fabric construction after consultation with its counsel and refused to accept an offer of a license to sell replacement fabrics. J.R.A. 475-76.

On April 5, 1956 Respondent Convertible Top Replacement Corporation was organized as a Maryland Corporation. On April 17, 1956 Automobile Body assigned Respondent Convertible Top a territorial grant under the Mackie-Duluk patent only, restricted to Massachusetts. J.R.A. 7. Ten days later, on April 27, 1956 Respondent commenced this action. J.R.A. 1. The respective patent counsels of Automobile Body and Respondent Convertible Top are in the same law firm. The jurisdiction of the district court was invoked because a question arises under the Patent Laws.

The District Court found the Mackie-Duluk patent infringed by replacing the top fabrics and contributorily infringed under 35 U.S.C. Section 271(c) by selling fabrics specially cut and intended for use in the patented combination. Although the district court recognized that all General Motors cars licensed under the patent and all Ford Motor Co. cars were licensed after July 21, 1955 (J.R.A. 27), it re-

garded replacing the worn fabric as reconstructing the patented combination. Misuse was not found. J.R.A. 33 n.1.

The Court of Appeals affirmed in an opinion interpreting 35 U.S.C. Section 271(c) without mentioning the Mercoid cases[3] decided by this Court, cases decided in other circuits interpreting Section 271(c), or the legislative history.[4]

In considering whether replacing the worn fabric was an infringement, the Court of Appeals distinguished the *Morgan Envelope* case[5] decided by this Court by saying:

> Since the element replaced by the defendants-appellants was a patented component of the Mackie-Duluk combination, the cases . . . upon which they rely, are not in point, for the elements replaced by the defendant in those cases, the roll of toilet paper and the abrasive stone, respectively, were not patented elements of the devices covered by the patents there in suit. *Infra*, p. 28, n. 2.

The Court of Appeals said that the top fabric itself was covered by the patent. *Infra*, pp. 27-28. While the opinion states that the patentees achieved their objective by devising a patentable *combination* of elements, *infra*, p. 26, it also states that form itself was patentable, *infra*, p. 28, relying on *Wilson* v. *Simpson*, 50 U.S. (9 How.) 109 (1850).

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[3] Mercoid Corp. v. Mid-Continent Inv. Co., 320 U.S. 661 (1944); Mercoid Corp. v. Minneapolis-Honeywell R. Co., 320 U.S. 680 (1944).

[4] The legislative history of the provisions relating to contributory infringement is discussed in the briefs filed in the court below, Brief for Appellants at 48-68; Reply Brief for Appellants at 10-16, and Respondent "does not, in general, take issue with the statements of law set forth in Appellants' brief on appeal . . . Brief for Appellee at 2.

[5] Morgan Envelope Co. v. Albany Paper Co., 152 U.S. 425 (1894).

Reasons for Granting the Writ

1. It is well settled that one directly infringes a patent covering a combination of old elements by selling a device which includes each element recited in any claim of the patent in the same operative relationship. One does not directly infringe if the device sold omits a material element of the patented combination. Contributory infringement was a judicially established doctrine to prevent a seller from avoiding the consequences of infringement by selling in substance the invention, but omitting one of the elements recited in the claims.[6]

The instant case involves the interpretation of the first statutory definition of contributory infringement in the history of the Patent Laws. The statute has been in force since January 1, 1953 and conflicting decisions of lower courts indicate that some courts apparently do not recognize the limited scope of contributory infringement intended by Congress. The interpretation of paragraphs (b), (c) and (d) in 35 U.S.C. Section 271 vitally affects the administration and enforcement of both the Patent Laws and the Antitrust Laws.

The court below appears to have relaxed the statutory requirements for obtaining the monopoly privileges of a patent by interpreting this section to cover the sale of an unpatented element not itself an invention. The decision of the court below appears to be based on the premise that although the top fabrics are not an invention as required by 35 U.S.C. Section 103 and not separately claimed as

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[6] *Wallace* v. *Holmes*, 29 Fed. Cas. 74 (No. 17,100) (D. Conn. 1871) established the doctrine and held that where the patent for a lamp covered a novel burner mechanism supporting a glass chimney, infringement could not be avoided by selling the burner mechanism without the chimney. Congressman Bryson, the sponsor of the bill enacted into Title 35, called contributory infringement the "metaphysics of metaphysics." 98 CONG. REC. A433 (1952).

would appear to be required by 35 U.S.C. Section 112, since they are especially designed and intended for use in the patented combination, selling the top fabrics constitutes contributory infringement under Section 271(c). J.R.A. 38. The apparent importance placed by the court below on the intended use alone is in conflict with cases decided by this Court, other courts of appeal, and the legislative purpose in enacting these provisions as set forth more fully below.

2. Although the constitutional issue was not raised in the courts below nor decided in any other cases within our knowledge, we think that the construction by the court below is unconstitutional because the Constitution provides for granting exclusive rights to the discovery of the inventor; that is, the exclusive or monopoly rights authorized by the Constitution for a limited time are to the invention. The construction by the court below grants limited monopoly rights to the patentee in a part of the combination claimed as the invention.

The constitutional issue was apparently recognized by Mr. Justice Jackson, dissenting in *Mercoid Corp* v. *Mid-Continent Inv. Co.* 320 U.S. 661, 680 (1944) where he said, "I see no constitutional or statutory authority for giving . . . [a combination patent] additional value by bringing into its monopoly all or any of the unpatentable parts."

3. The decision of the court below is in conflict with the *Mercoid* cases[7] decided by this Court before the enactment of 35 U.S.C. Section 271 and also in conflict with the decision of the Eighth Circuit Court of Appeals in *Dr. Salsbury's Laboratories* v. *I. D. Russel Co.*, 212 F.2d 414,

[7] *Supra* n. 3.

cert. denied, 348 U.S. 827 (1954), decided after enactment of the statute.

In the *Mercoid* cases this Court held that a thermostatic switch not separately claimed as an invention but specially designed and intended for use in a patented heating system combination was itself unpatented. Although the switch did not have an actual noninfringing use and was an essential element of the patented combination, it was held not entitled to the privileges of a patent. Thus, exercising monopoly control over the unpatented switches was held to be misuse.

In the *Dr. Salsbury's* case, the sole question was whether 35 U.S.C. 271 had changed the law as to misuse so as to change the result in *I. D. Russell Co.* v. *Dr. Salsbury's Laboratories*, 198 F.2d 473 (8th Cir. 1952) decided on the authority of the *Mercoid* cases. The court held that the newly enacted statute did not change the law of misuse established by the *Mercoid* cases, and the sale of an unpatented chemical sold with instructions to dissolve it in a prescribed amount of water to form the patented combination did not give rise to a cause of action for contributory infringement.

There does not seem to be a logical difference between misusing a patent by trying to prevent the sale of thermostatic switches specially designed for use in the patented combination, the sale of unpatented chemicals packaged with instructions to form the patented combination, and the sale of convertible top fabrics specially designed for use in the patented combination. The thermostatic switch, the chemical, and the top fabric are each only an unpatented, though essential, component part of a patented combination. And none of these component parts themselves are inventions.

Both the Second Circuit Court of Appeals and the Sixth

Circuit Court of Appeals[8] also recognize that the *Mercoid* cases are still the law although the specific factual situations the latter courts considered differ from the case at bar. Thus, the philosophy expressed in these cases is consistent with that of the Eighth Circuit Court of Appeals.

On the other hand, the decisions of the Fourth Circuit Court of Appeals in *Freedman* v. *Friedman*, 242 F.2d 364 (4th Cir., 1957) and the Fifth Circuit Court of Appeals in *Henry Hanger & Display Fixture Corp.* v. *Sel-O-Rak Corp.*, F.2d 123 U.S.P.Q. 3, 7 (5th Cir. 1959) are consistent with the decision below and in conflict with the decisions in the *Mercoid* and *Dr. Salsbury's* cases. The *Freedman* decision allowed the patentee to monopolize the sale of unpatented magnets when intended for use in a patented false teeth assembly. The *Henry Hanger* case allowed a *design* patentee to monopolize an unpatented part of the patented design. Both cases ignored the *Mercoid* decisions.[9]

This Court is urged to resolve the above-described conflicting decisions concerning contributory infringement under 35 U.S.C. Section 271 with an interpretation of this section consistent with the purposes of the Constitution, Antitrust Laws and other provisions of the Patent Laws. Provisions such as 35 U.S.C. Sections 103 and 112 guide the Patent Office expert Examiners in establishing the extent of the patent grant by requiring the patentee to limit the scope of his claims to define only inventive subject matter. This initial determination is important because the claims in a patent are presumed valid. 35 U.S.C. Section 282.

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[8] Prestole Corp. v. Tinnerman Products, Inc., F.2d , 123 U.S.P.Q. 242, 249-50 (6th Cir. 1959); Electric Pipe Line, Inc. v. Fluid Systems, Inc., 231 F.2d 370 (2d Cir. 1956).

[9] A district court opinion, relying on cases and articles without referring to the legislative history, states that Congress intended to change the law of the *Mercoid* cases. *Sola Electric Co.* v. *General Electric Co.*, 146 F. Supp. 625, 647 (N.D. Ill. 1956).

4. Without an infringement, there can be no contributory infringement.[10] Therefore, the court below had to find that the individual owner of a licensed automobile who replaced his worn fabric with one sold by the Petitioners infringed the patent. This finding is in conflict with the *Morgan Envelope* case[11] decided by this Court. The latter case was referred to in testimony during Legislative Hearings on contributory infringement as holding that replacing worn or exhausted parts in a patented combination do not give rise to a cause of action for contributory infringement.[12]

The Court of Appeals erred in distinguishing this case by saying that the "element replaced by the defendants-appellants was a patented component of the Mackie-Dulin combination" whereas the oval toilet paper rolls in the *Morgan Envelope* case "were not patented elements of the devices there in suit". *Infra*, p. 28, n. 2. By calling the fabrics patented, the court below made a complete departure from the accepted and usual understanding that a part is not patented unless separately claimed in a patent.[13] In fact, the top fabrics here in suit were not patented, while the oval toilet paper rolls were patented, although the claim to the oval roll was held invalid.

Throughout the entire history of the patent, the top fabric itself was never claimed as an invention. The first

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[10] 35 U.S.C. § 271 (c) (1952); Cold Metal Process Co. v. United Engineering Co., 235 F.2d 224, 230 (3d Cir. 1956); Radio Corp. of America v. Andrea Corp., 79 F.2d 626, 627 (2d Cir. 1935).

[11] *Supra* note 5.

[12] *Contributory Infringement of Patents*, Hearings Before Subcommittee on Patents, Trademarks and Copyrights of the House Committee on the Judiciary, 81st Cong., 1st Sess., Ser. 17 at 20 (1950).

[13] See the *Mercoid* cases, 320 U.S. at 668 and "[A] patent on a combination is a patent on the assembled or functioning whole, not on the separate parts." at 320 U.S. 684.

time it was claimed as an invention was in a footnote of the Brief for Appellee filed in the Court of Appeals.[14]

The *Morgan Envelope* case recognized that the patentee was entitled to an initial royalty for the sale of the patented combination, but had no right to a royalty each time an element of the combination was replaced unless that element was itself a valid invention separately claimed. 152 U.S. at 432.

We know of no cases in courts of appeal where replacing a single unpatented worn element of a patented combination was held to be an infringement. Cases like the *Morgan Envelope* case in which the separate claim to the replaced element has been held invalid recognize that the owner of the patented combination can replace the worn element without paying the patentee an additional royalty.[15] We see no reason for giving greater rights to the patentee who does not and could not validly claim the convertible top fabric separately as an invention.

The decision in the case at bar, therefore, appears to be in conflict with courts of appeal decisions in the Second and Third circuits,[16] and in conflict with *Micromatic Hone Corp.* v. *Mid-West Abrasive Co.*, 177 F.2d 945 (6th Cir. 1949) and *Landis Machine Co.* v. *Chaso Tool Co.*, 141 F.2d 800 (6th Cir.), *cert. denied*, 323 U.S. 720 (1944). The latter case applied the reasoning of the *Mercoid* cases.

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[14] Brief for Appellee at 8.

[15] A claim to a hypodermic needle was held invalid and a claim covering a hypodermic syringe with the needle an element of the claimed combination was held not infringed by replacing worn needles. *Payne* v. *Dickinson*, 109 F.2d 52 (3d Cir.), *cert. denied*, 310 U.S. 637 (1940). A claim to a breaker arm in an automobile distributor was held invalid and a claim covering the electrical distribution system with the breaker arm as an element of the claimed combination was held not infringed by replacing worn breaker arms. *General Motors Corp.* v. *Preferred Electric & Wire Corp.*, 79 F.2d 621 (2d Cir. 1935), *cert. denied*, 296 U.S. 655 (1936).

[16] *Ibid.*

5. This case presents an important novel issue concerning the propriety of a patent owner shifting his patent rights among different corporations. So far as we know this is the first case where the owner of two combination patents covering the same structures (J.R.A. 32) has assigned a territorial grant limited to a single state under but one of the patents to a newly formed corporation just before the latter brings suit while continuing to receive royalties under both patents for the sale of replacements for worn parts in the patented combinations.

Although Automobile Body had before suit accused the Petitioners of contributorily infringing both the Mackie Duluk and Ackermans patents, a territorial grant in only the former was assigned to Respondent, Convertible Top. The assignment of a territorial grant in one patent alone to the Respondent corporation is in effect splitting a cause of action to create the possibility of piece-meal litigation, a practice long frowned upon by the courts.[17] In addition, formation of a shell corporation with no assets of value to institute suit under a territorial grant insulates the real parties in interest from even bearing court costs in the event the patent is held invalid. It is important that this Court prevent such manipulation of patent rights from establishing a precedent for other patentees.

6. The questions presented are of great importance in determining the rights of all types of replacement part manufacturers and dealers who make and sell replacement parts specially designed for use in patented combinations. The decision in this case is of specific importance in the automotive trade where many flourishing businesses de-

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[17] Panoualias v. National Equipment Co., 269 Fed. 630 (2d Cir. 1920), *cert. denied*, 256 U.S. 691 (1921); Horton v. New York Central H. R.R. Co., 63 Fed. 897 (N.D.N.Y. 1894). See also Helene Curtis Industries v. Sales Affiliates, 247 F.2d 940, 945 (2d Cir. 1957).

pend upon the right and ability to replace specific components of patented automotive devices.

7. The instant case is important in lending guidance to the lower courts in the proper use of legislative materials for statutory interpretation. Although the legislative history was presented to the Court of Appeals, this history was not mentioned in its opinion. An interpretation of paragraphs (b), (c) and (d) in Section 271 consistent with the purposes of Congress in enacting the Patent Laws and Antitrust Laws requires reference to the legislative history. Consideration of the following factors indicate that the court below was in error in interpreting the statute.

a. A broad statutory definition of contributory infringement was solicited by a private group critical of the *Mercoid* cases, the *Carbice* case, the *Leitch* case, and the *Morton Salt* case.[18] The responsible committee of Congress twice held hearings on this broad definition and twice refused to report bills with this broad definition.[19]

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[18] Carbice Corp. v. American Patents Dev. Co., 283 U.S. 420 (1931). Leitch Mfg. Co. v. Barber Co., 302 U.S. 458 (1938). Morton Salt Co. v. Suppiger, 314 U.S. 488 (1942).

For the critical comments, see *Contributory Infringement in Patents —Definition of Invention*, Hearings Before Subcommittee on Patents, Trademarks and Copyrights of the House Committee on the Judiciary, 80th Cong., 2d Sess.; ser. 21 at 3-6 (1948).

[19] Section 3 of the provisions on contributory infringement which Congress refused to enact read as follows:

> The sale of a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, if especially made or adapted for use in such process and not suitable for actual commercial noninfringing use, shall constitute contributory infringement. H.R. 3866, 81st Cong. 1st Sess. (1949); H.R. 5988, 80th Cong., 2d Sess. (1948).

In a memorandum from the subcommittee counsel to Congressman Bryson, the sponsor of the bill enacted into Title 35, these provisions were considered "too controversial" and counsel recommended that no action be taken on these provisions. A "watered down provision on the subject of contributory infringement" in H.R. 9133, 81st Cong.,

b. The original provisions were changed to narrow the definition of contributory infringement. In the original draft the sold component only had to be designed and intended for use in the patented combination and not suitable for actual commercial noninfringing use. This draft was changed to require that the sold component be "a material part of the invention" and "not suitable for substantial noninfringing use". The spokesman for the same private group explained what was meant by these changes to the responsible committee of Congress.[20] The real purpose of Section 271(c) was to prevent a seller of the invention from avoiding infringement by a technical interpretation of the patent claims.

c. Both the House and Senate Reports state that the statute is to codify principles of contributory infringement and that paragraph (c) is much more restricted than many proponents of contributory infringement believe should be the case.[21]

d. The scope of Section 271 ought to be interpreted within the framework of the Constitution which authorizes Congress to grant the inventor the exclusive right for a limited time to his discovery to promote the progress of science and the useful arts. We do not see how the Constitutional purposes are advanced by giving the inventor a limited monopoly to a part which is not his discovery merely because it is used in the combination which is his discovery.

2d Sess. (1950) was mentioned in this memorandum. Memorandum dated November 29, 1950 to Mr. Bryson from C. Murray Bernhardt. File on H.R. 3866 in National Archives.

[20] Hearings on H.R. 3760 Before Subcommittee on Patents, Trademarks and Copyrights of the House Committee on the Judiciary, 82nd Cong., 1st Sess., Ser. 9 at 154-57 (1951); Brief for Appellants at 63-65.

[21] S. Rep. No. 1979, 82d Cong., 2d Sess. at 9, (1952); H.R. Rep. No. 1923, 82d Cong., 2d Sess. at 8 (1952).

e. The scope of Section 271 should be interpreted within the framework of the Patent Laws which require the patentee to define his invention with particularity[22] (by claims) so that the expert Patent Office Examiner can search the prior art to see if the claimed subject matter represents an inventive departure over the prior art as required by 35 U.S.C. Section 103. The scope of Section 271 should also be determined within the framework of the Antitrust Laws and 35 U.S.C. Section 282 (1) recognizing unenforceability as a defense.

Congress has provided for the examination of patent applications by technical experts who search the prior art generally defined by the claims submitted by the applicant. If the claimed subject matter does not represent an inventive departure over the prior art uncovered on this search, the Patent Office refuses to grant a patent until the claims are amended to include limitations distinguishing the applicant's invention from the prior art.

If the invention claimed is a combination of elements, such as defined by the Mackie-Duluk patent claims, the Patent Office Examiner does not search the prior art to see if a single element, such as the top fabric of the claimed combination is an invention. The construction of Section 271 by the court below permits monopoly control over an element without even subjecting that element to the scrutiny of the Patent Office to determine whether the element is an invention.

[22] 35 U.S.C. §112 (1952).

Conclusion

For the foregoing reasons, this petition for a writ of certiorari should be granted.

DAVID WOLF
Counsel for Petitioners
68 Devonshire Street
Boston 9, Mass.

of Counsel,
CHARLES HIEKEN

Appendix A

Infringement of patent

(a) Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent.

(b) Whoever actively induces infringement of a patent shall be liable as in infringer.

(c) Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

(d) No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having done one or more of the following: (1) derived revenue from acts which if performed by another without his consent would constitute contributory infringement of the patent; (2) licensed or authorized another to perform acts which if performed without his consent would constitute contributory infringement of the patent; (3) sought to enforce his patent rights against infringement or contributory infringement. 35 U.S.C. §271.

Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section

102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made. 35 U.S.C. §103.

Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most clearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. 35 U.S.C. §112.

ANTITRUST LAWS

Sec. 1. Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal. Every person who shall make any such contract or engage in any such combination or

conspiracy, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding fifty thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court. 69 Stat. 282, 15 U.S.C. §1.

Sec. 2. Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding fifty thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court. 69 Stat. 282, 15 U.S.C. §2.

Sec. 3. Every contract, combination in form of trust or otherwise, or conspiracy, in restraint of trade or commerce in any Territory of the United States or of the District of Columbia, or in restraint of trade or commerce between any such Territory and another, or between any such Territory or Territories and any State or States or the District of Columbia, or with foreign nations, or between the District of Columbia and any State or States or foreign nations, is hereby declared illegal. Every person who shall make any such contract or engage in any such combination or conspiracy, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding fifty thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court. 69 Stat. 282, 15 U.S.C. §3.

Sec. 8. That the word "person", or "persons", wherever used in this act shall be deemed to include corporations and associations existing under or authorized by the laws of either the United States, the laws of any of the Territories, the laws of any State, or the laws of any foreign country. 26 Stat. 210 (1890), 15 U.S.C. §7.

Sec. 4: That any person who shall be injured in his business or property by reason of anything forbidden in the antitrust laws may sue therefor in any district court of the United States in the district in which the defendant resides or is found or has an agent, without respect to the amount in controversy, and shall recover threefold the damages by him sustained, and the cost of suit, including a reasonable attorney's fee. 38 Stat. 731, 15 U.S.C. §15.

Appendix B

United States Court of Appeals
For the First Circuit

No. 5488.

ARO MANUFACTURING CO., INC., ET AL.,
DEFENDANTS, APPELLANTS,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.,
PLAINTIFF, APPELLEE.

APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS.

Before MAGRUDER, *Chief Judge*, and WOODBURY and HARTIGAN, *Circuit Judges*.

David Wolf and *Charles Hieken*, with whom *Ezekiel Wolf*, *Wolf & Greenfield* was on brief, for appellants.

Elliott I. Pollock, with whom *Paul V. Power* was on brief, for appellee.

OPINION OF THE COURT.
August 31, 1959.

WOODBURY, *Chief Judge*. This is an appeal from an interlocutory judgment ordering, adjudging and decreeing that claims 3, 4, 5, 7, 8, 9 and 10 of United States Patent No. 2,569,724, issued on October 2, 1951, to Harry A. Mackie and Stanley Duluk for "Convertible Folding Top with Automatic Seal at Rear Quarter" are valid and have been infringed by the defendants, that the defendants, their officers, agents and servants be enjoined from further infringement, and that the question of the plaintiff's damages for past infringement be referred to a Master.

The plaintiff-appellee, Convertible Top Replacement Co.,

Inc., is the possessor by territorial grant of the right, title and interest in and to the Mackie-Duluk patent in and for the Commonwealth of Massachusetts together with all rights of action accruing since December 30, 1953, for infringement thereof in the Commonwealth. The defendants manufacture and sell, for replacement purposes only, the fabric portions of convertible tops which they either install themselves or sell pre-fabricated for installation by trimmers, that is to say, persons engaged in the business of putting on new tops, repairing upholstery etc., and, to an insignificant extent, to do-it-yourself car owners. The defendants' tops are custom-designed by make of car and year of manufacture to permit accurate replacements on all standard cars manufactured in the United States and are so advertised. They pre-fabricate and keep in stock the fabric parts only of convertible tops for various models of cars manufactured by the Ford Motor Company from 1952 to 1955, and for many models of General Motors cars manufactured for the years 1950 to 1954, when many convertible automobiles produced by those two manufacturers were equipped with Mackie-Duluk tops.

The District Court resolved the issue of the validity of the claims of the Mackie-Duluk patent in suit in favor of the plaintiff. It said: "Mackie-Duluk was a substantial and enlightened step, filling a long-felt want, in a field in which defendants have produced, with one exception, only paper patents, the most emphasized being foreign, which did not even purport to do what Mackie-Duluk accomplished." On this appeal, however, the question of validity has hardly been argued at all and we are not at all sure that all the evidence on that issue has been included in the parts of the record printed in the joint record appendix before us. Under these circumstances we can only take the validity of the patent claims in suit for granted

and turn immediately to the hotly contested issue of infringement.

The basic question argued before us on this appeal is whether the defendants, by manufacturing and selling replacement convertible top fabrics cut to fit and adapted for use in the combination of elements covered by the plaintiff's patent, are guilty of contributory infringement as defined in Title 35 U.S.C. § 271(c), or whether, in doing what they did, they merely were making a permissible replacement of a part which expectedly became worn out or defective sooner than other parts of the patented combination.

In addressing ourselves to this question we turn first to the patent in suit and its prior art.

Folding tops for vehicles consisting of bows of wood or metal covered with a flexible waterproof fabric (in the days of "The Deacon's Masterpiece; or, The Wonderful 'One-Hoss Shay'"[1] with leather) are, of course, as old as the automobile art which in the beginning only adopted with necessary modifications the much older art of collapsible tops for chaises, buggies and some other horse drawn vehicles. The rear panels of the folding tops of earlier days were fastened permanently at the bottom to the outside of the top of the rear portion of the body of the vehicle, and the quarters, the rear portions of the sides of the vehicle, if protected at all, were protected with flaps or curtains, sometimes integral with the top and sometimes not, fastened at the bottom to the outside of the top of the body with buttons, snaps or some equivalent means of fastening. Naturally, to prevent tearing, these quarter flaps had to be unfastened by hand when the top was lowered and when the top was put up fastened again by

[1] Poem by Oliver Wendell Holmes, 1857-1858:
"Boot, top, dasher, from tough old hide
Found in the pit when the tanner died."

hand for neat appearance and also to prevent the entrance of rain. This manual fastening and unfastening of the bottoms of the quarter flaps presented no great problem until the advent of the so-called convertible automobile with a folding top operated mechanically rather than manually. The problem presented by the quarter flaps of tops of this kind was first partially solved by fastening the bottom of the flap to the outside of the top of the body of the vehicle with "releasable fastening means," that is to say, with some sort of slide fastening device which would detach automatically when the top was lowered. The major part of the problem remained, however, for when the top was put up the flaps had to be fastened manually, which meant that the operator was required to get out of the car altogether, or at least to reach out, often, of course, in the rain. The object of the Mackie-Duluk patent was "to provide an automatic fastening and sealing means at the top and sides of the tonneau of the convertible" which "never has to be operated or touched by the driver of the car." And, as we have already indicated, the District Court found that the patentees succeeded in attaining their object by devising a patentable combination of elements.

The Mackie-Duluk device consisted of providing an elongated flap integral with the quarter sections of the fabric top adapted to be permanently fastened at the bottom deep within the body of the car, at or perhaps below, but certainly not in front, of the axis of rotation of the bows, to a trough welded to the body of the car and provided with a drain to carry off water entering between the flap and the car body. In addition, to minimize the entrance of water between the body and the flap, they provided a "wiper arm" so-called, which in effect acted as an additional, low, rearward bow pressing the downwardly extending flap outwardly against the top of the body of the vehicle as the top is raised from its folded position to close, a

substantially to close, any gap there might be between the inside of the top of the body of the car and the flap extending downward into the interior of the automobile body.

Claim 8 of the patent may be taken as typical of those in suit. It reads:

> "In a convertible automobile body, the combination of a lower metal body structure or tonneau having a body panel, a folding bow structure supported by the tonneau and having flexible top material supported by the bows and having the top material at the rear quarter extending down, a rain trough secured to the bottom of said flexible top material and to said panel on the inside and below the top of the metal body or tonneau, said flexible top material spreading and adjoining the inside of the top of the side of the tonneau when the bow structure is raised, and a wiping arm secured to a part of the movable bow structure and acting simultaneously with said bow structure to engage the inside lower portion of the top material in raising the top to press the two adjoining members toward each other and thereby produce a weather seal therebetween."

The defendants, as we have said, manufacture and sell only the fabric part of the convertible top structure. And from this they argue at length that, since fabric tops stretched over bows are admittedly very old in the vehicle art, they are only producing an unpatentable component of the combination covered in the patent in suit. If the argument were sound "there would be nothing to discuss," as the Court pointed out in *Heyer* v. *Duplicator Mfg. Co.*, 263 U.S. 100, 101 (1923). The argument, however, is unsound for the Mackie-Duluk patent does not broadly cover the fabric portion of a folding top of any form or shape.

It specifically covers the fabric part of such a top of a particular form or shape, *i.e.*, one with elongated flaps at the rear quarters designed to extend deep within the body of the convertible automobile for permanent attachment to a rain trough at or below the axis of rotation of the bows. It is true that the District Court found that it was not new to bring "the fabric from outside the tonneau at the rear quarters, inside." But it found that the patentees were the first to extend the flaps down far enough so that their bottom lines were at the axis of rotation of the bows and to show that there the fabric could be permanently attached to the bows and the tonneau without ripping when the top was lowered or raised, and that therein lay the patentable novelty of the patentees' fabric.[2]

Form being patentable in itself, see *Wilson* v. *Simpson*, 9 How. 108, 123 (1850), in which it is said: "Form may be given to a piece of any material,—wood, metal, or glass—so as to produce an original result, or to aid the efficiency of one already known, and that would be the subject for a patent," we come to the question whether the shape of the patentees' fabric constituted "a material part of the invention" within the meaning of that phrase as used in § 271(c) of Title 35 U.S.C., quoted in the margin.[3]

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[2] Since the element replaced by the defendants-appellants was a patented component of the Mackie-Duluk combination, the cases of *Morgan Envelope Co.* v. *Albany Paper Co.*, 152 U.S. 425, (1894), and *Micromatic Hone Corp.* v. *Mid-West Abrasive Co.*, 177 F.2d 934 (C.A. 6, 1949), upon which they rely, are not in point, for the elements replaced by the defendant in those cases, the roll of toilet paper and the abrasive stone, respectively, were not patented elements of the devices covered by the patents there in suit.

[3] Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer."

Reading this section in the light of the earlier decisions to be considered presently we do not think it could have been intended to prevent the rightful owner of a patented machine from making repairs to a broken, worn or defective part, even though covered by the patent, either himself or through someone other than the patentee. Nor do we think the section is to be read to prevent the owner of a patented machine from replacing from a source other than the patentee minor patented parts of a combination which in the normal use of the machine may be expected frequently to wear out or break and hence to require replacement at short intervals to keep the whole machine in working order and condition. That is to say, we think the rule stated and applied in *Wilson* v. *Simpson*, 9 How. 108 (1850), and *Heyer* v. *Duplicator Mfg. Co.*, 263 U.S. 100 (1923), is still the rule under Title 35 U.S.C. § 271(c).

In the *Wilson* case the Court held that the owner of a patented planing machine had the right to keep his machine in operation by replacing the patented cutting knives therein from sources other than the patentee, it appearing that the knives, although an essential element of the patented combination, could be expected in the normal use of the machine to wear out, become useless and require replacement at least every sixty or ninety days. In reaching this result the Court said at page 125:

> The right of the assignee [the owner of the machine] to replace the cutter-knives is not because they are of perishable materials, but because the inventor of the machine has so arranged them as a part of its combination, that the machine could not be continued in use without a succession of knives at short intervals. Unless they were replaced, the invention would have been but of little use to the inventor or to others. The other constituent parts of this invention, though liable

to be worn out, are not made with reference to any use of them which will require them to be replaced. These, without having a definite duration, are contemplated by the inventor to last so long as the materials of which they are formed can hold together in use in such a combination. No replacement of them at intermediate intervals is meant or is necessary. They may be repaired as the use may require. With such intentions, they are put into the structure. So it is understood by a purchaser, and beyond the duration of them a purchaser of the machine has not a longer use. But if another constituent part of the combination is meant to be only temporary in the use of the whole, and to be frequently replaced, because it will not last as long as the other parts of the combination, its inventor cannot complain, if he sells the use of his machine, that the purchaser uses it in the way the inventor meant it to be used, and in the only way in which the machine can be used."

In *Heyer* the question was whether the owners of certain costly and durable patented duplicating machines were entitled to replace from any source they chose the patented bands of gelatine used in the machines for transferring the print to be multiplied, which bands were of a size, were attached to spools adapted for, and were intended for use in the patented machine. In answering this question in the affirmative the Court specifically pointed out that while the machine might last indefinitely the bands were exhausted after limited use, about one hundred copies, and were "cheap and common articles of commerce." Reaffirming the *Wilson* case it said:

"The owner when he bought one of these machines had a right to suppose that he was free to maintain it

in use, without the further consent of the seller, for more than the sixty days in which the present gelatine might be used up."

And then the Court said that in cases of this sort the judicial function is "only to establish the construction of a bargain on principles of common sense applied to the specific facts."

When replacement of a patented component of a patented combination constitutes a legitimate repair and when it constitutes a forbidden reconstruction of the combination of which it forms a part is difficult to determine and cannot be determined by the application of any verbal formula. Each case must be decided on its own facts, pretty much as an individual instance. This court put the problem neatly and succinctly in *Goodyear Shoe Machinery Co.* v. *Jackson*, 112 Fed. 146, 150 (C.A. 1, 1901), wherein it is said:

"It is impracticable, as well as unwise, to attempt to lay down any rule on this subject, owing to the number and infinite variety of patented inventions. Each case, as it arises, must be decided in the light of all the facts and circumstances presented, and with an intelligent comprehension of the scope, nature, and purpose of the patented invention, and the fair and reasonable intention of the parties. Having clearly in mind the specification and claims of the patent, together with the condition of decay or destruction of the patented device or machine, the question whether its restoration to a sound state was legitimate repair, or a substantial reconstruction or reproduction of the patented invention, should be determined less by definitions or technical rules than by the exercise of sound common sense and an intelligent judgment."

Applying as best we can the "common sense" test of the case last cited and the *Heyer* case we conclude that the defendants were not making permissible repairs to, but were substantially reconstructing, the convertible top combination covered by the Mackie-Duluk patent. Couched in terms of the statute, we think they were making and selling a component of the plaintiff's patented combination "constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use."[4]

In substantiation of this conclusion we point out that the fabric portion of the top is not a minor or relatively inexpensive component of the patented combination, of a part of the invention which expectably would wear out after a very short period of use, like the cutter-knives in the *Wilson* case or the bands of gelatine in the *Heyer* case. There was testimony, and the court below found, that barring accidental damage the average life of a convertible top was about three years, although with care under favorable conditions or in the hands of a person not too fastidious as to appearance it would last much longer. The expectable life span of the fabric is no doubt shorter than the expectable life span of the other components of the convertible top and of the car itself. But the life of the

[4] The appellants do not establish that their prefabricated tops of which complaint is made are staple articles or commodities of commerce "suitable for substantial noninfringing use," and thus escape application of the statute, by pointing out that the tops it pre-fabricates for convertibles having the Mackie-Duluk structure can be applied in a noninfringing way by cutting off the flaps and putting on snap fasteners to cooperate with the snap fasteners on the outside of the top of the tonneau to hold the cover or boot customarily provided to cover the top and protect it from dust when the top is down. The fact remains that the appellants do not make tops for Mackie-Duluk equipped convertibles for application in the old fashioned prior art way but only in the way shown in the Mackie-Duluk patent.

fabric is not so short, nor is the fabric so cheap, that we can safely assume that an owner would rationally believe that in replacing it he was making only a minor repair to his top structure. On the contrary, we believe that replacing the fabric would be counted a major reconstruction of the top assembly. In short, we agree with the District Court's finding of infringement.

Other arguments advanced by the appellants have been considered but are rejected as too insubstantial to call for discussion.

Judgment will be entered affirming the judgment of the District Court.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1959

No. 21

ARO MANUFACTURING CO., INC., ET AL., *Petitioners*,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC., *Respondent*.

BRIEF FOR RESPONDENT IN OPPOSITION TO THE PETITION FOR WRIT OF CERTIORARI

ELLIOTT I. POLLOCK
Attorney for Respondent
904 Ring Bldg.
Washington, D. C.

PRESS OF BYRON S. ADAMS, WASHINGTON, D. C.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1959

No. 582

ARO MANUFACTURING CO., INC., ET AL., *Petitioners*,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC., *Respondent*.

BRIEF FOR RESPONDENT IN OPPOSITION TO THE PETITION FOR WRIT OF CERTIORARI

This case actually comprises a quite ordinary case of patent infringement, turning on questions of fact. It has now been before the courts of the First Circuit for almost four years; and throughout this time there has never been any question as to legal principles which control. The issues have at all times been factual; and the real issues presented by the Petition are still only issues of fact. Alleged issues of law, and constitutionality, are never reached under the facts of this case.

The record, upon which the courts found clear infringement, includes some eight depositions, approximately 110 interrogatories, 118 requests for admission,

and a number of fact stipulations. Trial required two weeks, during which time fact and expert witnesses testified at length for both sides, and physical demonstrations of the infringing structures were had. Models and other physical exhibits not now before this court were presented; and the entire proceedings were directed, solely, to a thorough development of the facts.

The decisions below were entirely factual in nature. The District Court opinion (119 USPQ 122) did not, for example, find it necessary to cite a single case. The Court of Appeals opinion is of essentially similar nature. While the Court of Appeals did cite prior cases, it nowhere disagreed with legal pronouncements, but merely determined the applicability of such cases to the particular facts developed by the extensive record.

The decisions below in no way conflict with rulings in other circuits or with applicable decisions of this Court, and are clearly correct in light of the particular facts here involved. It is accordingly submitted that further review by this Court is not warranted.

THE PETITION IGNORES PERTINENT FACTS

In its statement of the case, Petitioners have failed to mention a number of significant facts regarding the infringing structure, and Petitioners' acts of infringement. In view of the voluminous record below, only some of these facts will now be presented herein.

THE RECORD ESTABLISHES THAT THE MACKIE-DULUK FABRIC SHAPE IS NOVEL, UNIQUE, AND THE THING WHICH SOLVED LONG-STANDING PROBLEMS

The Mackie-Duluk invention solved problems of long-standing nature in the convertible top industry (JA 371, 372); and, as noted by the District Court (JA 34), the patented solution "was a substantial and enlightened step, filling a long felt want * * *."

In solving these problems, Mackie-Duluk did not make changes in the automobile body, the top linkage, or parts of the automobile which had existed prior to their invention (JA 143-4); and the actual improvement taught by Mackie-Duluk, and their invention, resided in a specially designed top fabric of unique shape* adapted to be installed on an otherwise conventional car in a completely new manner. Every witness, testifying for both sides below, agreed that the novel fabric shape taught by Mackie-Duluk and the unique mode of installation afforded thereby, was of major and primary importance in achieving the improvements accomplished by Mackie-Duluk. Petitioner Harold Shapiro, for example, testified (JA 85):

"Q. Does the idea of having a section of the fabric coming down inside the car and actually

* The so-called "wiping arm" used by Mackie-Duluk (Petition p. 4) acts as a conventional bow for holding the specially shaped fabric in place (JA 276). It is new, since prior fabrics did not have an elongated downwardly extending flap, whereby no bow was needed in this region; but once the new flap was provided, it became desirable to provide a new bow in this region for cooperation with the new flap. The invention, however, is in the new fabric shape, for without this shape there would be no purpose whatsoever in the wiper arm (JA 329). Petitioner Harold Shapiro himself testified that the wiping arm was actually "immaterial" (JA 84).

fastening on part of the car, for instance, adjacent to the trough, is that *the important thing?*
A. That is correct." (Emphasis added.)

Petitioner George Shapiro testified to similar effect (JA 49), as did Petitioners' witness Brosens (JA 323); and Respondents' witnesses Pickard (JA 398, 398-9), and Booth (JA 153).

It is also established by the record below that the uniquely shaped fabric taught by Mackie-Duluk was quite new. Petitioner Harold Shapiro expressly admitted (JA 85-6) that, to his knowledge, Mackie-Duluk's structure had never been employed prior to actual commercialization of the invention. Indeed, although Petitioners submitted some fifty prior patents and publications during trial (JA 267), none showed the uniquely shaped Mackie-Duluk fabric or the new mode of installation afforded thereby; and the District Court so found (JA 35).

DEFENDANTS' OWN ADMISSIONS SHOW INFRINGEMENT UNDER 35 U.S.C. § 271(c), AS WELL AS UNDER 35 U.S.C. § 271(b) AND (a)

Question 1 of the Petition (pp. 2-3) acknowledges that the Mackie-Duluk fabric, as sold by Petitioners, is an "essential element * * * of [the] patented combination"; and that Petitioners' Mackie-Duluk type fabrics are "especially cut and intended for use in the patented combination." The record goes much further, however, and shows that Petitioners fully admitted violating every provision of 35 U.S.C. § 271, no matter how strictly construed.

Thus, it was admitted (e.g. Pl. Req. Adm. 15 and Answer) that Petitioners sell a component of a patented machine, i.e. the specially shaped Mackie-Duluk

fabric. Petitioner further admitted (e.g. JA 84) that the special fabric constituted a material part of the invention; that (e.g. JA 50-1, and Pl. Req. Adm. 17 and Answer) these fabrics were specifically designed and sold by Petitioners for use in an infringing installation, i.e. they were sold knowing the same to be especially made or especially adapted for use in an infringement of the patent; and that these specially cut tops could be used only in the patented combination, had absolutely no other use, and could not be installed on cars not having the invention thereon (JA 50, 52, 120) i.e. the specially shaped fabrics are "not a staple article or commodity of commerce suitable for substantial non-infringing use."

The District Court found facts of similar import, e.g. Petitioners' specially cut fabrics were "admittedly purposely designed for, and advertised for, Mackie-Duluk tops" (JA 38); and "defendants' top would be useless" except in the patented arrangement (JA 41). The Court of appeals also found the record to be so clear that, in describing Petitioners' special top, the exact language of the statute could be directly employed; see 270 F. 2d 200, 205.

It is believed significant that the Petition nowhere challenges any of the foregoing findings of fact; and indeed, Petitioners could hardly quarrel with such findings since they are fully supported by Petitioners' own testimony.

While the Petition concentrates on 35 U.S.C. § 271 (c), the record also shows clear violation of other sections of the statute.* Thus, Petitioners' admissions below fully establish a consistent and active course of

*See 35 U.S.C. § 271(a) and (b), Petition Appendix A.

inducing infringement of the patent. Petitioners, over the years, persistently sought to have persons purchase and install the specially cut Mackie-Duluk fabrics, to infringe the patent; they distributed advertising literature; they gave demonstrations; indeed, they maintained a facility for actually installing the fabrics on cars, and, over the years, themselves installed the specially cut fabrics to produce infringing arrangements (JA 107, 109, 463-71).

The nature of the special Mackie-Duluk fabrics, and Petitioners' own installation activities, established moreover that Petitioners were actually reconstructing the patented invention; and the Court of Appeals so found (270 U.S. 200, 205), as did the District Court (JA 39). By so reconstructing the patented invention, and by their own installation procedures, Petitioners thus further violated 35 U.S.C. § 271(a). The Petition, p. 6, admits this to be so, by stating that the District Court found not only contributory infringement but also "found the Mackie-Duluk patent infringed by replacing the top fabrics."

In these circumstances, legal questions regarding 35 U.S.C. § 271(c), presented by the Petition, are never reached; for Petitioners would, on the facts of record, still be liable for infringement under other sections of the statute not even mentioned in Petitioners' Questions or fairly comprised therein.

ALTHOUGH PETITIONERS COULD HAVE MADE A NON-INFRINGING STRUCTURE, THEY INTENTIONALLY COPIED THE PATENTED INVENTION

But for the Mackie-Duluk special fabric shape, the remaining portions of the Mackie-Duluk arrangement are of such conventional nature that a fabric top of

entirely different shape can be installed on the car. During trial, Petitioners themselves demonstrated installation of another fabric shape, and testified that a non-infringing installation using such a different fabric shape would be simpler, more rapid, and cheaper than one using the special Mackie-Duluk type fabric (JA 213).

Petitioners, although having a clear choice throughout as to the fabric shape which could be used, chose not to make, sell or install a fabric which they knew to be non-infringing; but, in the alternative, intentionally copied (e.g. JA 59) the special Mackie-Duluk fabric and proceeded to specially cut, market and install a fabric of the unique shape taught by Mackie-Duluk. The infringement was intentional, and the result of copying.

ARGUMENT

The Facts Are Clear; Petitioners' Question 1 Is Moot

The facts of record establish, clearly and convincingly, that Petitioners have violated the letter and spirit of 35 U.S.C. § 271, and every section thereof. Notwithstanding the sweeping phraseology of Petitioners' Question 1, 35 U.S.C. § 271(c) goes into much further detail in defining contributory infringement. As developed at pp. 4-5 of this brief, Petitioners violated every element of the statute; and so admitted. The Courts below, in finding contributory infringement, did not do so on the basis of generalities (cf. Question 1 of the Petition) but made specific findings of a highly detailed nature. Since Petitioners do not challenge these findings of fact, it is believed that said findings are controlling.

Question 1 of the Petition has absolutely no relation to the real holdings below; ignores the specific findings, and indeed ignores the language of the statute. The question is, therefore, believed to be moot.

The Circuit Courts of Appeal Are in Complete Agreement With One Another on the Doctrine of Contributory Infringement

The Petition, pp. 10-11, acknowledges that the decision of the First Circuit Court of Appeals below is consistent with decisions of the Fourth and Fifth Circuit Courts of Appeal; but then alleges that these three circuits are in conflict with the Eighth Circuit decision in *Dr. Salsbury's Laboratories* v. *I. D. Russell Co.*, 212 F. 2d 414. This allegation is in complete error.

The Dr. Salsbury's Laboratories case was decided on an issue of fact; and the Eighth Circuit Court of Appeals, in finding no infringement, merely held that defendants' products in that particular case did not meet the statutory definition of contributory infringement, 35 U.S.C. § 271(c). Thus, the Court held, at 212 F. 2d 414, 417:

> "[35 U.S.C. § 271(c)] * * * specifically provides that said component *not* be 'a staple article or commodity of commerce suitable for substantial non-infringing use.' Whatever the significance of the other provisions of the Act, we believe this exceptive clause is controlling here. * * * [Defendant's product] is a staple which did not lose its identity as a common raw material."

Indeed, the *Dr. Salsbury's* case itself disagrees with Petitioners; and specifically states that its ruling is in complete conformity with other decided cases. Thus the Court held:

> "Since, in the respect noted, Section 271(d) *is readily harmonized with prior case authority,*

plaintiff cannot state a new cause of action without, in the very face of the former adjudication, reopening *the factual issue* of the chemical nature of the parties' respective products." (Emphasis added.)

In each of the several cases cited by Petitioners, as in the instant case, the Court went to the statute defining infringement and contributory infringement, examined the specific provisions thereof, and thereafter ruled whether the facts of record established contributory infringement as defined in the statute. Any differences in the final decisions comprise the result of factual distinctions only; and the several Courts of Appeal have never expressed any confusion or conflict regarding the law itself.

Merely by way of example, in *Friedman v. Friedman*, 242 F. 2d 364 (Petition p. 11), the Court, as in the instant case, specifically found that defendant's product was *not* a staple article of the type contemplated by the statutory exclusion. In the *Dr. Salsbury's* case the Court found that defendant's product *was* a staple article, wherefore it was expressly excluded from the statute. The decisions are therefore entirely consistent in respect to their pronouncements of the law and applicable principles; and their sole distinction resides in particular findings of fact.

There Is No Constitutional Question; Petitioners' Question 2 Is Moot

Prior to enactment of 35 U.S.C. § 271(c), literally hundreds of reported decisions, including decisions of this Court, recognized contributory infringement to be a tort, violative of the patent laws. The doctrine of contributory infringement is firmly engrained in the law.

Congress, in enacting 35 U.S.C. § 271(c), hardly exceeded its authority. This Court has long held that the power of Congress to legislate upon the subject of patents is plenary. *McClurg* v. *Kingsland*, 42 U.S. 202, 206. See also *United States* v. *Dubilier Condenser Corp.*, 289 U.S. 178, 189. The clear and concise definition of contributory infringement now spelled out in the statute, and every element of that definition, represents no more than a detailed statement of what has long and consistently been recognized as comprising the violation in question.

The record shows that Petitioners' actions, and the very special nature of their fabric top, are such that Petitioners are clear contributory infringers under the statute; and would be equally clear contributory infringers under any of hundreds of reported decisions preceding enactment of 35 U.S.C. § 271(c). Since Petitioners can find no solace in the facts, they now seek, in a desperate effort to avoid their clear liability, to destroy the statute itself. Even here, however, Petitioners' arguments are not well founded.

Petitioners, in challenging the constitutionality of the statute, quote Mr. Justice Jackson, dissenting in *Mercoid Corp.* v. *Mid-Continent Inv. Co.*, 320 U.S. 661, 680 (Petition p. 9). As the quote itself shows, Mr. Justice Jackson was there speaking only of "unpatentable parts." However, the uniquely shaped fabric tops here involved, and found to be infringements, have patentable novelty *per se*, wherefore they most certainly comprise subject matter cognizable by Congress under Article 1, Section 8 of the Constitution.

The patentable novelty of the top fabrics, *per se*, was emphasized by the Court of Appeals below, 270 F. 2d 200, 203:

> "The argument, however, is unsound for the Mackie-Duluk patent does not broadly cover the fabric portion of a folding top of any form or shape. It specifically covers the fabric part of such a top of *a particular form or shape*, * * *. [The District Court] found that the patentees were the first to extend the flaps down far enough so that their bottom lines were at the axis of rotation of the bows and to show that there the fabric could be permanently attached to the bows and the tonneau without ripping when the top was lowered or raised, and that *therein lay the patentable novelty of the patentees' fabric.*" (Emphasis added.)

And the Court of Appeals further found (decision p. 203, footnote 2) that:

> "* * * the element replaced by defendants-appellants was a *patented component* of the Mackie-Duluk combination * * *." (Emphasis added.)

These findings are quite correct, and fully supported by the record, including Petitioners' own admissions; see pp. 3-4 of this brief. The mere fact that this patentably novel fabric was claimed in association with other entirely conventional elements hardly changes the result; for, as is often done in claim drafting, said conventional elements are recited "to describe the invention [i.e. the unique fabric, and its installation] intelligently," *Morrin* v. *Robert White Engineering Co.*, 143 Fed. 519 (CA-2, 1905). See also, *K. W. Ignition Co.* v. *Temco*, 283 Fed. 873, 880 (CA-6, 1922).

The constitutional issue regarding § 271(c) is never reached in this case. We are here dealing with activities which comprise clear and complete violations not only of 35 U.S.C. § 271(c), but of 35 U.S.C. § 271(a) and (b) as well. Petitioners never deny, or seek to

justify, their violations of these latter sections. Moreover, we are dealing with a part which, as the Courts found, itself has patentable novelty. Since Question 2 (Petition p. 3) is based upon the premise that we have a component "itself not being an invention," the Question posed is based on facts contrary to the record and the findings below. The question is, therefore, moot.

There Is No Question of License Involved: Petitioners' Question 3 Ignores the Record

Petitioners' Question 3 assumes a licensed situation. However, both the District Court (JA 39) and the Court of Appeals, 270 F. 2d 200, 205, found that Petitioners' operations did not comprise a permissible repair, but actually comprised a reconstruction of the patented invention. Accordingly it did not matter whether the original structures had been licensed or not. See, for example; *Automotive Parts Co.* v. *Wisconsin Axle Co.*, 81 F. 2d 125, 127; *Davis-Electrical Works* v. *Edison Electric Light Co.*, 60 Fed. 276; and *Thomson-Houston Electric Co.* v. *Ohio Brass Co.*, 80 Fed. 712, 722-3.

The issue of repair or reconstruction is one of fact; see the *Davis Electrical Works* case, supra. Moreover, the findings below that Petitioners "reconstruct" are fully supported by the record. Since Petitioners nowhere challenge these findings of fact, such findings fully dispose of Petitioners' Question 3.

It should further be noted that, in framing Question 3, Petitioners have ignored the record and the actual findings below. No release and or license granted to others prior to suit gave any express rights permitting sale or use of Mackie-Duluk type fabrics, without li-

cense; and the sole issue was therefore whether there was some *implied license* arising from these agreements upon which Petitioners could rely. This question of implied license is one of fact only, *Green v. Electric Vacuum Cleaner Co.*, 132 F. 2d 312, 313-4. The District Court found no license, express or implied, upon which Petitioners could rely, (see JA 33 footnote).

Moreover, Petitioners' Question 3 assumes "a manufacturer licensed under the patent for a combination;" and the Petition, p. 6, further alleges "all Ford Motor cars were licensed after July 21, 1955". The Ford agreement to which Petitioners refer, however, at no time licensed any cars (see JA 510 et seq.); and indeed the Ford agreement was entered into more than a year after the last infringing car had been manufactured and sold by Ford (there being no claim for infringement as to Ford cars later than the 1954 model).

Petitioners' Question 3 accordingly presents no issue warranting review by this Court. The question assumes a licensed situation, whereas the record shows that there was no license, express or implied, on which Petitioners could rely; and further establishes that Petitioners' actual reconstruction of the invention renders all questions of license moot.

There Has Been No Misuse: Petitioners' Question 4 Is Fully Answered Below

The facts surrounding Respondent's acquisition of rights in the Mackie-Duluk patent are clearly developed in the record; and these facts establish that Respondent has at all times acted entirely properly, and with entirely proper motives, in its efforts to resolve this controversy with Petitioners.

Petitioners presented the issue of alleged misuse, and the alleged impropriety of Respondent's territorial grant, to the District Court (Defendants' Answer, paragraphs 17 and 18). After extensive trial, the Court found no misuse (JRA 33, footnote):

> "Finally, they claim mis-use of the patent, a defense I found clearly not made out."

In the Court of Appeals, Petitioners repeated their charges, whereafter the Court held, 270 F. 2d 200, 206:

> "Other arguments advanced by the appellants have been considered but are rejected as too insubstantial to call for discussion."

A petition for rehearing was then filed by Petitioners, repeating these same allegations, specifically discussing the *Mercoid* cases (320 U.S. 661, 680), and alleging "The decision of this court is obviously in direct conflict with these decisions of the Supreme Court." The Court of Appeals, after due consideration, denied the petition for rehearing.

It has, of course, been long settled that a territorial grant is entirely proper. See, for example, 35 U.S.C. § 261, which repeats a long and unbroken line of statutory and case authority to similar effect:

> "* * * The applicant, patentee, or his assigns or legal representatives may in like manner grant and convey an exclusive right under his application for patent, or patents, to the whole *or any specified part of the United States.*" (Emphasis added.)

The record shows that Respondent's acquisition of its territorial grant was based on good consideration; and further shows that there has been no improper relationship whatsoever between Respondent and its predeces-

sor, before, during, or after, acquisition of Respondent's rights (JA 101-2). Petitioners' insinuations of impropriety are thus not well founded in either fact or law.

The allegations of misuse are, significantly, presented in the Petition by way of innuendo and suggestive writing, unsupported by any pertinent record citations. Indeed, in arguing misuse, Petitioners actually misstate the record. As one example, it is noted that the Petition alleges (p. 14) that there are "two combination patents covering the same structures (JRA 32)." Petitioners' record citation hardly supports this conclusion, and the record shows the converse. Petitioners' own original Answer (JA 8) admits, at paragraph 18, that the two patents in question "each * * * could be practiced without infringement of the other", i.e. the two patents relate to entirely different inventions. Acquisition of rights in one of two distinct and separately patented inventions hardly comprises "splitting a cause of action".

Nor is there any truth, much less substance, in Petitioners' allegations (p. 14) regarding "a shell corporation", "real parties in interest", or "manipulation of patent rights". Such slurs, without support in the record, are reprehensible.

The Decision Below Does Not Conflict With Applicable Decisions of This Court

The instant case clearly distinguishes from prior decisions of this Court, cited by Petitioners. Thus, in *Mercoid Corp. v. Mid-Continent Inv. Co.*, 320 U.S. 661, 663, this Court noted:

> "There was ample evidence to sustain the findings of the District Court that respondents endeavored

> to use the license agreement so as to prevent the sale or use of combustion stoker switches in these heating systems unless they were switches made by Minneapolis-Honeywell and purchased from it or its sub-licensees."

And, at decision p. 665 this Court further noted that it was deemed improper for a patentee to use the patent "as the effective means of restraining competition with *its* sale of an unpatented article." Mr. Justice Frankfurter summarized these factors in the *Mercoid* cases, decision p. 676:

> "The Court holds in effect that the owner of a patent who exacts, as the condition of a license, that unpatented materials used in connection with the invention *shall be purchased only from the licensor* cannot obtain relief from equity against one who supplies such unpatented materials * * *. In this view I concur." (Emphasis added.)

In *Automatic Radio Mfg. Co.* v. *Hazeltine Research Inc.*, 339 U.S. 827, 831, this Court noted that, in a different factual situation, the *Mercoid* cases would not be controlling:

> "Petitioner apparently concedes that these cases do not, on their facts, control the instant situation. It is obvious that they do not. There is present here no requirement for the purchase of any goods. Hazeltine does not even manufacture or sell goods * * *."

In the instant case, as in the *Hazeltine* case, Respondent does not manufacture or sell any goods. Respondent has at no time sought to require, as a condition for license, that any unpatented article, or any article whatsoever, be purchased from it; nor has Respondent ever used, or attempted to use, the patent to

secure to itself any competitive advantage in the sale of goods." Respondent has merely sought to license Petitioners under the patent*, and being unsuccessful in this effort, Respondent has sought to enforce its patent rights by the instant litigation. Such actions have never been condemned by any decision of this Court, certainly not by the *Mercoid* cases; and to the contrary, such actions are specifically sanctioned, and recited not to comprise misuse, by 35 U.S.C. § 271(d) [see Petition, Appendix A].

Thus, the Court of Appeals, and the District Court, in no way contravened any applicable decision of this Court when Petitioners' charges of misuse were overruled. Indeed, the decisions below are in full accord with the *Hazeltine* case, supra. Moreover, the decisions below are entirely consistent with decisions in other Circuits. See, for example, *Florence-Mayo Nuway Co.* v. *Hardy*, 168 F. 2d 778, 785 (CA-4, 1948):

> "There is nothing to the contrary in the decision in Mercoid Corporation v. Mid-Continent Investment Co., 320 U.S. 661, 64 S. Ct. 268, 88 L. Ed. 376. That case merely applies the salutary rule that a combination patent may not be used to protect an unpatented part *from competition*. Nothing of that sort is involved here. What the defendants are doing is manufacturing and selling machinery with the knowledge, purpose and intent that it shall be used in a combination which will infringe. The case is one where plaintiff is using his patent *not to monopolize the sale of what is not patented but to prevent defendants from aid-*

* Petitioners originally desired such a license from Respondent's predecessor (JA 474), since Petitioners' own counsel admittedly thought that Petitioners might be infringing (JA 224). Petitioners later refused license on the ground that an alleged redesign of the structure avoided infringement (JA 475).

> *ing others to infringe what is patented.* A clearer case of contributory infringement could not well be imagined than that presented by this record. (Emphasis added.)

See also *Metallizing Engineering Co. v. Metallizing Co. of America*, 62 F. Supp. 274, 276-7.

The *Micromatic Hone* and *Landis Machine Co.* cases, cited at Petition p. 13, each involved a situation in which the patentee sought to acquire, in himself a competitive advantage in the sale and or installation of unpatentable parts. The holdings in these cases are therefore entirely consistent with this Court's decision in the *Mercoid* cases, where such action was condemned. By the same token, however, these cases in no way conflict with the Court of Appeals decision in the instant case.

The decisions below, moreover, do not conflict with *Morgan Envelope Co. v. Albany Paper Co.*, 152 U.S. 425 (Petition pp. 12-13). This Court expressly recognized the doctrine of contributory infringement in that case, and stated that in a proper factual situation

> "sale of a single element of a combination, with intent that it shall be united to the other elements, and so complete the combination, is an infringement."

This Court found no infringement under the particular facts of *Morgan Envelope*, since the product was "unpatentable", was "perishable", was not used in "a practical reconstruction of the device", and since the patentee "intended" that one purchasing the original article would have the right to replace.

In the instant case, however, the facts are the direct converse. The Court below expressly considered the

Morgan Envelope case and analogous decisions of this Court (see 270 F. 2d 200, 203-4); but found that the specially shaped fabric *did* have patentable novelty; was *not* perishable within the meaning of prior decisions, *was* used in a "major reconstruction of the top assembly", and that car owners would not "rationally believe" the contrary (see 270 F. 2d 200, 205). The entire distinction was, therefore, factual; and Petitioners, again, do not challenge these findings of fact.

CONCLUSION

For the foregoing reasons, it is respectfully submitted that the Petition should be DENIED.

ELLIOTT I. POLLOCK
Attorney for Respondent
904 Ring Bldg.
Washington, D. C.

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FILED
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JAMES R. BROWNING, Clerk

Supreme Court of the United States

OCTOBER TERM, 1959

No. 21

ARO MANUFACTURING CO., INC., ET AL.,
PETITIONERS,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.,
RESPONDENT.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

REPLY BRIEF FOR PETITIONERS

DAVID WOLF
Counsel for Petitioners
68 Devonshire Street
Boston 9, Mass.

of Counsel,
CHARLES HIEKEN

Blanchard Printing Company, Boston, Mass. — Law Printers

Supreme Court of the United States

OCTOBER TERM, 1959

No. 382

ARO MANUFACTURING CO., INC., ET AL.,
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ON WRIT OF CERTIORARI TO THE
UNITED STATES COURT OF APPEALS
FOR THE FIRST CIRCUIT

REPLY BRIEF FOR PETITIONERS

I. Important Questions of Federal Law Are Involved

The instant case involves an error by the court below showing a misunderstanding of perhaps the most elementary and important concept of patent law; namely, the meaning of "patented". Its reliance on a belief that the top fabric is patented finds no basis in either the cases or statutes defining the body of patent law developed dur-

ing the history of our nation. The Respondent quotes the error of the Court of Appeals in calling the top fabric a patented component, Brief for Respondent at 11, but a component is not patented unless separately claimed in a patent. The top fabric was never separately claimed. J.R.A. 175.

The Patent Laws represent a narrow exception to the monopolization proscribed by the Antitrust Laws. And Congress has established a procedure for obtaining this legal monopoly in a whole title of the United States Code, 35 U.S.C. Sections 1-273 (1952). This procedure requires the patentee to "particularly point out what he regards as his invention", 35 U.S.C. 112, Petition p. 20; i.e., claim the invention. Under the provisions of 35 U.S.C. Section 103, Petition pp. 19-20, a patent cannot be granted for the *claimed* invention unless the *claimed* subject matter represents an inventive departure over the prior art.

The purposes of requiring the patentee to claim his invention are at least threefold. (1) The claims define an area of search for the expert Patent Office Examiner looking for prior patents and publications which anticipate the claimed subject matter. The Examiner is thus able to refuse to allow the grant of a patent until the patentee limits his claims to subject matter representing an inventive departure over the prior art.

(2) The claims, tell the public the arrangement of elements which may not be made, used or sold. If the patentee claims an element itself as an invention, the claims describe features of the element which distinguish it as an invention so that the public may avoid infringement by not making, using or selling an element with such features. *Motion Picture Co.* v. *Universal Film Co.*, 243 U.S. 502, 510 (1917).

(3) The claims prevent the patentee from later asserting monopoly control over subject matter which he did

not invent and submit for examination by the expert Patent Office Examiner. *Brooks* v. *Fisky*, 56 U.S. (15 How.) 211, 215 (1853).

Each of the claims in the patent in suit recites the combination of flexible top material, a folding bow mechanism, a wiping arm and the automobile body in a specified operative relationship. Petition p. 27. Even if the top fabric itself were an invention, the patentee receives no rights to a monopoly over the fabric when it is not separately claimed. *Special Equipment Co.* v. *Coe*, 324 U.S. 370, 376 (1945); *Rowell* v. *Lindsay*, 113 U.S. 97, 101 (1885); *Corn Planter Patent*, 90 U.S. (23 Wall.) 181, 224 (1874).

But the Court of Appeals regards any element of a patented combination as being separately patented, regardless of whether the element is separately claimed. In its opinion, it states that cutting knives, individual elements in a patented planning machine combination, Petition p. 29, and gelatin bands, individual elements in a patented duplicating machine combination, Petition p. 30, are patented. Yet, these elements were not separately claimed.

II. The Top Fabric Is Not an Invention

During the oral argument before the Court of Appeals, Chief Judge Woodbury asked Mr. Pollock, counsel for Respondent, if he were claiming that the top fabric itself was an invention, and Mr. Pollock answered no. In the opinion of the Court of Appeals it recognized that "the District Court found that the patentees succeeded in attaining their object by devising a patentable combination of elements." Petition p. 26. Neither court below made a finding that the top fabric itself was an invention, notwithstanding contrary allegations by Respondent. Brief for Respondent p. 12. In any event, whether the top fabric itself

is an invention is irrelevant because it was not separately claimed.[1]

If the decision of the court below is allowed to stand, the usefulness of patent claims is seriously impaired. Not only must the public avoid making, using or selling the patented combination defined by the claims, but it must avoid selling an element with dimensions chosen so that its only actual commercial use is in the patented combination. This is true even though the element is shown in the prior art and therefore not itself an invention. And since the element is itself not separately claimed, the expert Patent Office Examiner does not make a determination as to whether the element itself represents an invention over the prior art.

Whether the patentee receives a limited monopoly in such unpatented elements used in the patented combination is thus left to a judicial determination without the benefit of an independent evaluation of its merit as an invention by the Patent Office Examiner. This bypasses the administrative plan envisioned by Congress when establishing the Patent Office and providing for examination of patent applications by technically qualified experts. It

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[1] During the prosecution of the application in the Patent Office, the attorneys said, "The real invention is fastening the folding material considerably below the top of the tonneau and then using a wiping arm automatically operated by the bow structure for wiping the inside of the folding material as the top is raised and pressing it against the top of the tonneau." J.R.A. 445, 447.

In arguing the validity of the patented *combination* over the prior art Ackermans patent, Mr. Pollock said, ". . . there is the important distinction that in Mackie-Duluk, the fabric extends down to the trough and is permanently attached to it . . ."

"I will further note that in the Mackie-Duluk structure there is what we call a wiper arm. This wiper arm exerts pressure on the fabric or at least restricts the inward movement of the fabric. This becomes very important under actual operating conditions since this of itself prevents the top material at the rear quarter from being inside or from flapping about, due to wind forces or other forces which might be applied." J.R.A. 301.

further expands the area of uncertainty which surrounds the scope of every patent so that increased litigation may be expected while reducing the pressure of free competition upon the owners of combination patents contrary to the purposes of the Antitrust Laws.

III. Tying the Grant of a Patent License to the Purchase of an Unpatented Component from a Source Designated by the Patentee Is Misuse

Respondent contends that misuse is suggested by immendo. Brief for Respondent p. 15. The petition directly states that the facts in the present case fit squarely within the rule of the *Mercoid* cases holding that a patent cannot be used to control the sale of an unpatented element. As in this case, the plaintiff in that case, Mid-Continent Investment Co., was solely a patent holding corporation not engaged in the sale of the patented combination or elements thereof. Licenses to use were granted only on condition that the user purchased the unpatented thermostatic switches from manufacturers who paid royalties under the patent and themselves manufactured and sold only the unpatented elements for use in the patented combination. Royalties were based on the sale of unpatented elements. In the case at bar, an implied license to use the patented combination is granted to the purchaser of that patented combination when his top fabric wears out only if he purchases his replacement top-fabric from one who pays royalties to the patentee.

We see no difference in principle between the case at bar, the *Mercoid* cases or other cases involving tying clauses in which a license to use a patented device is conditioned upon directing additional profits to the patentee from the sale of unpatented parts or materials. The logic

of the *Mercoid* cases is sound. There is no logical difference between designing a thermostat to operate over a prescribed temperature range for use in a patented heating system and designing the shape and dimensions of flexible top fabric material to fit in a body shell as an element of a patented folding top.

In fact, the present case is a more flagrant example of misuse than the *Mercoid* cases because the top fabrics sold by Petitioners replaced worn fabrics in licensed patented combinations and the Seventh Circuit Court of Appeals, reversed by this Court, said, ". . . a purchaser of Mercoid's accused devices, who used it in his furnace for the purpose intended by Mercoid, other than for repair and replacement made necessary by deterioration so as to preserve its fitness, would be guilty of infringement." *Mid-Continent Investment Co.* v. *Mercoid Corp.*, 133 F.2d 803, 808 (7th Cir. 1942).

And Judge Learned Hand said, "The monopolist cannot prevent those to whom he sells from . . . reconditioning articles worn by use, unless they in fact make a new article. *Wilson* v. *Simpson*, 9 How. 109, 123." *United States* v. *Aluminum Co. of America*, 148 F.2d 416, 425 (2d Cir. 1945).

IV. Neither Court Mentioned the Purpose of Section 271(c)

The court below and Respondent have never mentioned the purpose of section 271(c). It is true, as the Respondent states, that the court below thought this issue too insubstantial for discussion. Yet, it did not and could not state that the language of the statute is so clear and unambiguous that its purpose can be determined from reference to the language alone without examining the purposes and other provisions of the Patent Laws, the purposes of the

Constitution and Antitrust Laws, and the legislative history. The present case presents a situation where this Court can demonstrate the use of all of these factors in properly interpreting statutory provisions. We think the purposes of Congress in enacting legislation will be often frustrated if lower courts are allowed to interpret new statutes without determining purpose by reference to decisions of this Court codified in the statute, other related statutory provisions, and the legislative history.

V. The District Court Found That Some Top Fabrics Sold by Petitioners Had Other Actual Noninfringing Uses

The Petitioners have never questioned that the replacement fabrics which they sold were intended for use in convertible automobiles which incorporated the Mackie-Duluk patented combination as original equipment. The District Court recognized that some top fabrics would fit in convertibles not covered by the patent when it said, ". . . [The fabrics] by happenstance may also fit some cars with other types of tops. This does not alter the fact that they are admittedly purposely designed for, and advertised for, Mackie-Duluk tops." J.R.A. 38.

No facts are in dispute. The question is whether the courts below were correct in disregarding the fact that the fabrics were "a commodity of commerce suitable for substantial noninfringing use" because of Petitioners' admitted intended use. We think the courts below were in error in failing to recognize that this quoted phrase from Section 271(c) bars the patentee from maintaining a suit for contributory infringement, regardless of the intended use of the fabrics.

Conclusion

For the foregoing reasons and those advanced in the petition, it is respectfully requested that the petition for writ of certiorari be granted.

DAVID WOLF
Counsel for Petitioners
68 Devonshire Street
Boston 9, Mass.

of Counsel,
CHARLES HIEKEN

ERRATUM

The citation to 98 CONG. REC. A433 (1952), Petition p. 8 n. 6, should be to 98 CONG. REC. A416 (1952).

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No. 21

In the Supreme Court of the United States

OCTOBER TERM, 1959

ABO MANUFACTURING CO., INC., ET AL., PETITIONERS

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

MEMORANDUM FOR THE UNITED STATES AS AMICUS CURIAE IN SUPPORT OF THE PETITION FOR A WRIT OF CERTIORARI

J. LEE RANKIN,
Solicitor General,

ROBERT A. BICKS,
Acting Assistant Attorney General,

CHARLES H. WESTON,
RICHARD H. STERN,
Attorneys,
Department of Justice, Washington 25, D.C.

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In the Supreme Court of the United States

OCTOBER TERM, 1959

No. 582

ARO MANUFACTURING CO., INC., ET AL., PETITIONERS

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

MEMORANDUM FOR THE UNITED STATES AS AMICUS CURIAE IN SUPPORT OF THE PETITION FOR A WRIT OF CERTIORARI

STATEMENT

Respondent in this proceeding filed a complaint which charged petitioners with infringement and contributory infringement of a patent for a top for convertible automobiles. The patent covers the combination of a flexible top fabric, supporting structures, an automobile body, and a mechanism for sealing the fabric against the side of the automobile body in order to exclude rain from the car's interior. Tops embodying this patent have been installed in various models of Ford and General Motors convertibles. The components of the patented combination, other than the fabric, normally last the lifetime of the car, but the

fabric has a much shorter life and is usually replaced after three years of use, or oftener (J.A. 33–34). The consequent replacement demand for fabric tops has given rise to a sizable industry, of which petitioner Aro Manufacturing Co. is probably the national leader (*id.* 34). Its business has included manufacture and sale of fabrics designed to fit the models of Ford and General Motors convertibles equipped with tops embodying the patented combination on which suit is brought (*id.* 33).

On appeal from a judgment holding that petitioners had infringed respondent's patent, the court below stated that the "basic question" presented was whether petitioner's conduct constituted "making a permissible replacement of a part [the fabric] which expectedly became worn out or defective sooner than other parts of the patented combination" (Pet. 25), or whether such replacement constituted "a forbidden reconstruction of the combination" (*id.* 31). The court resolved this question in favor of "reconstruction", and hence patent infringement, upon the basis that "the life of the fabric is not so short, nor is the fabric so cheap, that we can safely assume that an owner would rationally believe that in replacing it he was making only a minor repair to his top structure" (*id.* 32–33).

INTEREST OF THE UNITED STATES

When a patented machine is sold by the patentee or his licensee, the purchaser is granted an implied li-

[1] We use the designation "J.A." to refer to the Joint Record Appendix in the court below, and the designation "Pet." to refer to the petition for certiorari.

cense of use. The patentee receives the reward for his patent monopoly from the profit opportunity afforded to him as sole maker and seller or from the royalties payable to him by those granted licenses to manufacture and sell. The question presented by the petition in the instant case which is of concern to the Government is whether the owner of a patent on a machine or combination comprised of unpatented elements is given the right to monopolize sale of an element thereof which has a substantially shorter life cycle than the machine's other components and must be replaced in order to preserve the continued utility of the purchased machine.[2]

The foregoing question is, we believe, of large public import. It raises an issue respecting the scope of the patentee's monopoly comparable to the issues passed upon in such cases as *Motion Picture Patents Co.* v. *Universal Film Co.*, 243 U.S. 502; *Carbice Corp.* v. *American Patents Corp.*, 283 U.S. 27; *Mercoid Corp.* v. *Mid-Continent Co.*, 320 U.S. 661. In these and other cases this Court has held that the patentee's monopoly is restricted to exclusion of others from manufacture, sale and use of the patented invention itself, and does not embrace monopolization of unpatented material used in, or necessary to the use of, the patented invention. It need hardly be stated that numerous enterprises, both in the automobile field and in many others, manufacture and sell unpatented replacement

[2] This is a restatement of the third question presented by the petition for certiorari (Pet. 3). The Government's failure to discuss the other questions presented by the petition is not intended to indicate disagreement with the petitioners' position on these questions.

parts and materials suitable for use in devices and machines which, in their totality, are covered by combination patents. The scope of the patentee's rights in relation to the activities of such enterprises has been a constantly recurring question and one of significant interest throughout the industrial economy.

As will be developed later, it is the Government's view that the holder of a patented machine or combination exhausts his patent rights when he or his licensee sells the machine covered by his patent, and that the purchaser or the purchaser's supplier does not infringe the patent upon replacement of an unpatented element which becomes unusable in ordinary course in advance of the other components of the combination, irrespective of the frequency of necessary replacements and irrespective of whether the replacement is relatively expensive and deemed by the purchaser to involve a major component.

DISCUSSION

1. Clearly and unmistakably the fabric top is an unpatented element of respondent's combination patent. Its patent covers only a combination of certain components, one of which is "flexible top material". Claims 1–9 of the patent each specifically begins: "In a convertible automobile body, the combination of * * *", and Claim 10, in which the word "combination" is omitted, equally claims combination only (J.A. 594–595). Since the patent makes no claim to invention based on the shape of the fabric employed, the fabric is an unpatented component of respondent's combination patent, and it is immaterial in this con-

ection whether the shape is such that it might have een patentable. The claim made in the patent is the easure of the grant.[3]

Since the patentee never claimed the fabric shape lone, the patent confers no monopoly grant over it, nd the patentee dedicated whatever invention lay in he separate elements of the combination claims. See ennock v. *Dialogue*, 2 Pet. 1, 16. In *Mercoid* this ourt said: "The patent is for a combination only. ince none of the separate elements of the combina- on is claimed as the invention, none of them when ealt with separately is protected by the patent onopoly." 320 U.S. at 667.

The court below, while referring to the flexible top aterial as having "patentable novelty" (Pet. 28), id not hold that this material was *patented*, which s the only relevant consideration. In fact, the court mplicitly held that the fabric part of the top was not self patented. If tops of the shape employed in espondent's combination patent were themselves pat- nted, petitioners unquestionably infringed the patent hen they manufactured and sold, as was found, abric tops of such shape. Determination of such in- ringement would have made unnecessary and irrele- ant what the court said was the "basic question" in he case, *i.e.*, whether replacement of the fabric por- ion of the top constituted replacement of a worn-out art of the combination or forbidden reconstruction hereof.

[3] *Graver Mfg. Co.* v. *Linde Co.*, 336 U.S. 271, 277; *Universal Oil Co.* v. *Globe Oil & Ref. Co.*, 322 U.S. 471, 484; *Milcor Steel Co.* v. *Fuller Co.*, 316 U.S. 143, 145–146.

2. *Motion Picture Patents Co.* v. *Universal Film Co.*, 243 U.S. 502, this Court held that the monopoly of a patent does not extend to licensing it upon the condition that the licensee purchase from the patentee unpatented materials necessary to the operation of the licensed patent. The Court held (p. 517) that to permit the patentee to "derive its profit, not from the invention on which the law gives it a monopoly but from the unpatented supplies with which it is used", is "wholly without the scope of the patent monopoly".* And the Court, after quoting the provisions of § 3 of the Clayton Act, which prohibit sale or lease of goods, "whether patented or unpatented", on the condition or agreement that the purchaser or lessee not use or deal in goods of a competitor of the seller or lessor, said that this enactment "must be accepted by us as a most persuasive expression of the public policy of our country with respect to the question before us". 243 U.S. at 517–518.

Carbice Corp. v. *American Patents Corp.*, 283 U.S. 27, 33, held that the doctrine of *Motion Picture Patents Co.* is applicable even though the unpatented material over which the patentee-licensor has sought to extend his monopoly is a "necessary" element of the patented product or the "dynamic" element of a patented combination.

If the grant of a combination patent confers upon the patentee power to exercise dominion over replace-

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* See, also *Carbice Corp* v. *American Patents Corp.*, 283 U.S. 27; *Leitch Mfg. Co.* v. *Barber Co.*, 302 U.S. 458; *Morton Salt Co.* v. *G. S. Suppiger Co.*, 314 U.S. 488; *B. B. Chemical Co.* v. *Ellis*, 314 U.S. 495.

ment of a worn-out, unpatented part of the combination—a replacement which is necessary if the patented machine or combination is to remain operative and perform the function for which it was purchased—the patentee would be given the same kind of partial monopoly over unpatented materials held not to be within the legitimate scope of the patent monopoly in *Motion Picture Patents Co.* and *Carbice.* To sanction such control would be to permit the patentee "to derive its profits, not from the invention on which the law gives it a monopoly, but from the unpatented supplies" necessary to its use or operation by the licensee or purchaser.

We submit that the decision of the court below runs counter to the tests held to be controlling in *Wilson* v. *Simpson,* 9 How. 109, the leading case in this Court dealing with the distinction between legitimate repair or replacement of parts of a patented machine and forbidden reconstruction. The case concerned a patented planing machine, the invention consisting of a combination of cutting knives with a pressure roller. The purchaser was there held to have the right to replace the knives, which normally wore out after 60 or 90 days of use. The Court said that, although there is no right to "rebuild" a patented combination, the machine exists notwithstanding the fact that destruction or impairment of one of its elements renders it inoperative; and that accordingly replacement of a worn-out essential part is permissible restoration of the machine to the original use for which it was bought. 9 How. at 123. The Court explained further that it is "the use of the whole" of

the combination which a purchaser buys, and that repair or replacement of a damaged or destroyed part is an exercise of the right "to give duration to that which he owns, or has a right to use as a whole." *Ibid.*[5]

Mercoid Corp. v. *Mid-Continent Co.*, 320 U.S. 661, is also directly in point. The Court there held that the scope of the patent grant conferred upon the owner of a combination patent does not embrace an unpatented appliance, even though it is an essential part of the combination; and that one who supplied such unpatented appliance, even though it was not a common article of commerce and was expressly designed for use in the patented combination, might not be held as a contributory infringer. If original supply of an unpatented element of a combination patent is not within the patent monopoly, *a fortiori* replacement thereof is not within the monopoly. We note, moreover, that the basic holding in *Mercoid* is not affected by such limitations as the enactment of 35 U.S.C. 271(c) imposed on the ruling in *Mercoid* respecting contributory infringement.[6]

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[5] *Morgan Envelope Co.* v. *Albany Paper Co.*, 152 U.S. 425, and *Heyer* v. *Duplicator Mfg. Co.*, 263 U.S. 100, likewise held that there is no infringement when the purchaser or licensee of a patented machine or combination replaces an element of the combination which has a temporary period of usefulness, so that replacement is known to be necessary for continued utilization of the machine or combination. These cases, on their facts, came clearly within the decision in *Wilson* v. *Simpson*.

[6] Section 271(c) states: "Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in

The provisions of § 271(c) with reference to contributory infringement are not reached until it is determined that respondent's patent was infringed by use of petitioners' fabric tops in the replacement of the worn-out fabric of convertible automobile tops where the tops installed as original equipment were covered by respondent's patent. There can be no contributory infringement in the absence of direct infringement. *RCA Mfg. Co.* v. *Andrea,* 79 F. 2d 626 (C.A. 2); *Bullock Elec. Co.* v. *Westinghouse Elec. Co.,* 129 Fed. 105 (C.A. 6). Mr. Justice Frankfurter stated in *Mercoid,* "In a word, if there is no infringement of a patent there can be no contributory infringer" (320 U.S. at 677); and Mr. Justice Roberts also observed in that case that "if the purchaser and user could not be amerced as an infringer certainly one who sold to him * * *. cannot be amerced for contributing to a non-existent infringement" (*id.* 674).[1] Moreover, § 271(c) defines contributory infringement in terms of infringement. It establishes liability as a contributory infringer where a component of a patented machine or combination is sold under specified circumstances, one of which is that the component is known to be especially adapted for use in "an infringement" of such patent.

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an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer."

[1] Although these were dissenting opinions, there is nothing in the majority opinion indicating any disagreement with the proposition that there can be no contributory infringement in the absence of infringement.

We also note that, while the distinction between repair or replacement and reconstruction may under some circumstances be one of fact, the question of the ground rules for resolving this question is one of law, and what is at issue in this case is the validity of the criteria applied by the court below.

We believe that the decisions of this Court warrant and require the conclusion that reconstruction of a patented machine or combination comprised of unpatented components is to be limited to true reconstruction of the machine, that is, re-creating it after the machine, viewed as a whole, has been destroyed or has otherwise disintegrated. We submit that, at the very minimum, the monopoly of such a patent grant is not infringed by replacement of an unpatented part normally having, and expected to have, a useful life shorter than the normal and anticipated life of the entire machine which, as distinct from its separate parts, alone had value for the purchaser.

CONCLUSION

For the foregoing reasons, it is respectfully submitted that the petition filed in this case should be granted.

J. LEE RANKIN,
Solicitor General.
ROBERT A. BICKS,
Acting Assistant Attorney General.
CHARLES H. WESTON,
RICHARD H. STERN,
Attorneys.

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OCTOBER TERM, 1959

No. 21

ABC MANUFACTURING CO., INC., ET AL., *Petitioners*,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC., *Respondent*.

RESPONDENT'S REPLY TO THE MEMORANDUM OF THE UNITED STATES AS AMICUS CURIAE

ELLIOTT T. POLLOCK
904 Ring Bldg.
Washington, D. C.

PAUL V. POWER
82 Devonshire St.
Boston, Mass.

Attorneys for Respondent

U.S. ARMED, WASHINGTON, D.C.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1959

No. 582

ABO MANUFACTURING CO., INC., ET AL., *Petitioners*,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC., *Respondent*.

RESPONDENT'S REPLY TO THE MEMORANDUM OF THE UNITED STATES AS AMICUS CURIAE

PRELIMINARY STATEMENT

This is a run-of-the-mill patent case.

1. The patent was found valid by the District Court—"Mackie-Duluk was a substantial and enlightened step, filling a long-felt want," (JA 34)—and, on appeal, "the question of validity has hardly been argued at all" (Pet. 24). Accordingly, said the Court of Appeals (Pet. 24-25), "Under these circumstances we can only take the validity of the patent claims in suit for granted and turn immediately to the *hotly contested* issue of infringement" (Italics added).

2. On that issue, the principal defense was that of repair. The District Court (Aldrich, J.) made numerous specific findings of fact adverse to petitioners on that defense; and said (JA 39), "Whether the test be that of substantial reconstruction, or domination of the part replaced, or frequency of replacement, I find that replacing the fabric is not permissive repair."

The Court of Appeals, applying and discussing the rule of *Wilson* v. *Simpson*, 9 How. 109, and of *Heyer* v. *Duplicator Mfg. Co.*, 263 U.S. 100, held that the terms of 35 U.S.C. § 271(c) "could [not] have been intended to prevent the rightful owner of a patented machine from making repairs to a broken, worn, or defective part, even though covered by the patent, either himself or through someone other than the patentee"; nor did the Court of Appeals read the statute "to prevent the owner of a patented machine from replacing from a source other than the patentee minor patented parts of a combination which in the normal use of the machine may be expected frequently to wear out or break and hence to require replacement at short intervals to keep the whole machine in working order and condition" (Pet. 29).

Then, after stating (Pet. 31) that instances wherein replacement of a component "constitutes a forbidden reconstruction of the combination of which it forms a part is difficult to determine and cannot be determined by the application of any verbal formula," and that (*ibid.*) "Each case must be decided on its own facts, pretty much as an individual instance," the Court of Appeals concluded (Pet. 32) that "the defendants were not making permissible repairs to, but were substantially reconstructing, the convertible top combination covered by the Mackie-Duluk patent."

3. Judge Aldrich said (JA 33, note 1), "Finally, they [the defendants, petitioners here] claim mis-use of the patent, a defense I find clearly not made out."

In the Court of Appeals, petitioners argued (Br. for Defendants, Appellants, 51, *et seq.*), "The Plaintiff Is Trying to Control the Sale of Unpatentable Fabric Tops," and cited, *inter alia*, *Carbice Corp.* v. *American Patents Corp.*, 283 U.S. 27, and *Mercoid Corp.* v. *Mid-Continent Co.*, 320 U.S. 661.

This argument evoked from the Court of Appeals only the comment (Pet. 33) that "other arguments advanced by the appellants have been considered but are rejected as too insubstantial to call for discussion."

4. What, then, does this case present that should call for intervention by the Government? We assume that the United States is not somehow *parens patriae* for adjudicated infringers, least of all in a case where infringement is as crass as that disclosed by the present record. Examination of the Government's memorandum shows that its arguments are based on premises that are either not substantiated or else contradicted by the record. Moreover, the record shows that the present case turns on an evaluation of complicated factual data, and that both courts below correctly applied to such data the unquestioned criteria heretofore announced by this Court, of which perhaps the controlling one, in the words of Mr. Justice Holmes in *Heyer* v. *Duplicator Mfg. Co.*, 263 U.S. 100, 102, was "common sense applied to the specific facts." Since it is not the function of this Court to formulate mere dicta, this case is plainly not one that justifies further review.

I. ESTABLISHED CRITERIA OF REVIEW ON CERTIORARI DEMONSTRATE THE LACK OF PUBLIC IMPORTANCE IN THE PRESENT CASE

While the Government says (U.S. Memo. 2) that the articles in question involve a sizable industry, relying on Judge Aldrich's original finding to that effect (JA 34), later proceedings reflected in the record cast doubt on that conclusion. The petitioner Shapiro, while on the witness stand prior to the original finding, exaggerated the quantity of infringing manufacture threefold in a desperate effort to make this case appear important. During a *later* inquiry into damages Shapiro filed an affidavit denying the truth of his testimony on the stand. Judge Aldrich thereafter found: (JA 46)

> "I find it difficult to believe that Shapiro's testimony on the stand was not reckless, or worse."

The top fabrics here involved were designed primarily for certain automobiles of 1954, and earlier, models (JA 33), cars which are now rapidly disappearing from the streets. The trial court found that the "percentage [of infringing tops sold] decreases as time progresses" (JA 46). At the present time, these tops are of little importance economically. Indeed, petitioner Aro, "the national leader," no longer makes *any* of these tops, and has adopted and sells an entirely different and clearly non-infringing fabric shape for use on the few 1954 and earlier cars still on the streets (Acct. Tr. 186, 187 516).[1]

Nor is the decision below shown to have any major economic effect on other industries. While the Gov-

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[1] The reference to "Acct. Tr." is to testimony taken during the subsequent accounting phase of the present litigation, and appended hereto as Appendix 1.

ernment asserts (U.S. Memo. 4) that the issue is "a constantly recurring question," litigation involving the question of "permissible repair" is in fact very infrequent. The Government's assertion, if intended to mean (as its statement seems to import) that the issue is a "constantly recurring question" in the courts, is simply not so. Thus, in the last ten years,[2] between *Williams* v. *Hughes Tool Co.*, 186 F. 2d 278 (C.A. 10), certiorari denied, 341 U.S. 403, and the present litigation, there has been only a single reported case on the question (and mentioned there only in passing); and that one case involved a very different factual situation, viz., the re-tipping of worn oil well drill bits. *Hughes Tool Co.* v. *Cole*, 113 F. Supp. 519, 525 (D.C. Okl., 1953).

Interestingly enough, in *Williams* v. *Hughes Tool Co., supra*, the Government also filed a Memorandum *Amicus Curiae* in support of the Petition for Certiorari, and presented arguments very similar to those it now puts forward here. In the earlier case, the Government conceded (U.S. Memo., No. 561 Oct. T. 1950, p. 6) that:

> "* * * whether a particular repair on a particular patented combination is of such major character as to constitute a reconstruction of the combination would not, ordinarily, it may be assumed, be regarded as a question warranting review by this Court."

It is submitted that this is still the case here. Indeed, the quoted statement amounts to an admission that, as a general rule and in a proper factual situation, there

[2] See digests of the United States Patent Quarterly (Key 39.70 "Infringement—Repair and Reconstruction"); and the Federal Digest (Key 255 "Making, Repair of, or Substitute for Patented Article").

may be a reconstruction even though not all parts of a combination are replaced; and this Court has indeed so held. *Cotton Tie Co.* v. *Simmons*, 106 U.S. 89.

In its prior memorandum (p. 7) as well as in its present one (p. 10), the Government sought to limit that general rule, without regard to any other factual considerations, to the situation where one part of a combination has a shorter life than any other part.

The circumstance that review was denied in *Williams* v. *Hughes Tool Co.* fairly indicates that this Court then considered the suggested distinction insufficient to warrant further review. The paucity of similar cases since that action confirms the relative unimportance of the issue. And in the infrequent instances when the question does arise, the facts are so different and distinct from what has gone before that no one decision ever has significant precedential value for the future.

Although the District Court's opinion (119 U.S. P.Q. 122) was published over fifteen months ago, and that of the Court of Appeals (270 F. 2d 200; 122 U.S.P.Q. 536) over five months ago, there has been, insofar as respondent is aware, no published professional comment on either decision. Indeed, the Department of Justice did not even hear of the rulings until recently; and the Solicitor General advised the Clerk of this Court on January 14, 1960, that the case came to his attention only "yesterday." It will therefore hardly be a surprise to the Court that the Department was advised of the rulings in question only at the instance of petitioners' counsel.

In short, any statements concerning the alleged importance of the present case can mean little more than that its determination is important to the petitioners.

II. THE COURT BELOW WAS CLEARLY RIGHT IN HOLDING THAT "EACH CASE MUST BE DECIDED ON ITS OWN FACTS, PRETTY MUCH AS AN INDIVIDUAL INSTANCE"

When this case was before the court below, petitioners strongly urged the Holmes "common sense" test (*Heyer* v. *Duplicator Mfg. Co., loc. cit. supra*), and further urged that each case should be decided on its own facts. Respondent entirely agrees. We attach hereto, as Appendix 2, a chapter of petitioners' Court of Appeals brief, from which it is plain that the question of reconstruction versus repair is one of ultimate fact. The sole controversy between the parties has always comprised no more than one of fact.

Respondent's brief before the Court of Appeals discussed, at pp. 26-31, eight different factual considerations, established by the specific facts of record here, which compelled the factual conclusion reached by both courts below that petitioners truly reconstructed the patented invention. Petitioners' brief before the Court of Appeals, pp. 25-47, discussed seven other factual considerations appearing in the record and bearing on that question (see Appendix 2). These fifteen factual points, and the proofs of record in regard to each, are often in direct conflict. The Court of Appeals resolved these fifteen factual controversies, and then decided the case (Pet. 31) "on its own facts, pretty much as an individual instance", in favor of reconstruction.

Consequently, review here could not rise above still another analysis of the fifteen factual considerations urged by the parties below.

III. THE GOVERNMENT'S MEMORANDUM RESTS UPON UNSUPPORTED AND ERRONEOUS ASSUMPTIONS OF FACT

Not only is the essential issue in the present case factual, but the Government's effort to inflate this litigation into one that raises the particular question which is said (U.S. Memo. 2-3) to be of public concern rests on assumptions that are demonstrably without record support.

The Government's argument (U.S. Memo. 9), that "There can be no contributory infringement in the absence of direct infringement," has no application here, as it necessarily assumes that there was no direct infringement. The contrary is however the fact.

Here, as is customary in patent litigation, the purpose of the trial was to determine whether there had been any infringement at all. In order to establish a *prima facie* instance of infringement, respondent proved that from 1952 through 1954, Ford Motor Co. sold Ford convertibles without any license whatsoever. In 1954 and thereafter, petitioners sold and actually installed on Ford cars, specially shaped replacement tops; and the resulting structure met each and every element of the claims in suit (JA 128 et seq.). Two such cars were demonstrated to the District Judge, who found infringement (J.A. 33, 41). There was at that time no license from the patentee to Ford, to the car owners, or to petitioners; and the District Judge specifically found (JA 38) that [Ford] cars manufactured with Mackie-Duluk tops were unlicensed. It would be difficult to imagine a clearer case of direct infringement.

Indeed, even as to the particular G.M. cars here involved, petitioners' own installation procedures, in

own trim shop, clearly amounted to actual recon-
ion of the patented invention; wherefore direct
gement was again established.

third question presented by the Petition (Pet.
restated by the Government (U.S. Memo. 3),[3] is
eated upon numerous additional erroneous as-
tions of fact.

r example, the Government's restated question as-
s that the Mackie-Duluk type fabric "has a sub-
ially shorter life cycle than the machine's other
onents." However, while the wiper arm, being
ructed of metal, would normally last the life of the
it is actually so mounted that in "one out of ten"
fteen" General Motors cars, the wiper arm falls
efore the top fabric is replaced (Tr. 402).[4] This
l part, although per se undamaged, therefore
ly has a shorter *practical* life than the fabric top.
ed the record shows that a top fabric may well last
or five years (JA 205), and the life of the trough
ften about the same (Tr. 406).

he restated question also assumes incorrectly that
Mackie-Duluk type fabric "*must* be replaced"; and
error is repeated at U.S. Memo. 7, where the Gov-
ment states that replacement with the particular
ric here involved "is necessary" etc. Petitioners

[3] "... whether the owner of a patent on a machine or
bination comprised of unpatented elements is given the right
nopolize sale of an element thereof which has a substantially
ter life cycle than the machine's other components and must
replaced in order to preserve the continued utility of the
chased machine."

[4] References to "Tr." are to testimony taken during the trial,
unprinted.

admitted, however, and both Courts below found (J.A. 39, 213; Pet. 32) that a quite different and clearly non-infringing fabric shape could be installed on the car without impairing the utility of the car. The District Court specifically found (JA 39, footnote 8) that—

> "If an owner does not want to replace with plaintiffs top, *he does not have to.* Defendants admitted it is even cheaper, and as an easier installation, to replace with the outside-snap type than with a new Mackie-Duluk." [Italics added.]

The Government's factual premise is, therefore, incorrect.

The Government's restated question also states, incorrectly, that frequent replacement of the fabric is necessary "to preserve the continued utility" of the automobile. This error is repeated at U.S. Memo. 7, where the Government states that replacement is necessary if the machine "is to remain operative". However, as has been shown, utility could be continued with an entirely differently shaped fabric. Moreover, replacement is not made for utility reasons in most cases, but, as the District Court found (JA 41) "because of convertible owners' interest in appearance." Indeed, the District Court found (JA 33) that "from the standpoint of utility a top might last many years * * *." The Court of Appeals also found that a top has utility for a time "much longer" than three years (Pet. 32). In other words, continued utility, and attractiveness, are entirely distinct insofar as life of the top fabric is concerned.

The Government's Memorandum (twice at p. 7) also states, incorrectly, that when replacement is made, the top is "worn-out". This error is repeated at U.S.

Memo. 4 (the fabric becomes "unusable"), and at U.S. Memo. 9 ("replacement of the worn-out fabric"). But, at the time of replacement, the fabric is ordinarily *not* "worn-out". Petitioners themselves admitted that replacement is often made when the top is "in perfectly good condition" (JA 98); and the District Court specifically found that, at replacement, the top usually has only "superficial wear" (JA 34) rather than being worn out.

The Government's Memorandum (p. 7) further incorrectly assumes that replacement represents "restoration of the machine to the original use". However, this case is not one in which, as in *Wilson* v. *Simpson*, 9 How. 109, the machine was "so arranged" by the inventor that replacement of the fabric has to be made in a particular way corresponding to the original structure; nor, is replacement effected "to identify the machine with what it was at the beginning of its use"; nor is replacement with the same top, and in the same manner as the original structure, "the only way in which the machine can be used." (All of the foregoing quotations are from this Court's opinion in *Wilson* v. *Simpson*.)

Indeed, here the facts are quite otherwise. Petitioners themselves argued at p. 11 of their Court of Appeals brief:

> "Replacement techniques and styling of the replacement top vary from that practiced by the original automobile manufacturer, often resulting in a replacement top appearing, and secured in many instances in a different manner from the original installation."

Petitioners made changes in both the styling and structure of the top fabric; and in some instances appar-

ently went so far as to make changes in the automobile body itself. Thus, see the Deposition of H. Shapiro, Oct. 4, 1956, p. 24 (unprinted):

> "* * * We made a top for the 1952 [Ford] car, which was *completely redesigned* in 1953; that is, the seam structure. Actually, the size has to be the same because it is going on the same frame, but the seam structure and the structure of the rear valance and the rear curtain *has been changed*, and we *did away* with the cushion and came out with the shingle, and *then we did away* with the shingle. In other words, *we probably had five patterns made of that particular model car, 134.*" [Italics added.]

And see (JA 125-6):

> "We made a top—*we made* [*it*] *completely different as far as looks were concerned*, with the 1952 Ford, because they had a very, very tremendous wrap-around curtain that was probably twice the size of what is on the car now * * *." [Italics added.]

And see (JA 475):

> "In installing this [Aro replacement] top in automobiles having elements similar to those shown in Figure 2 of the Mackie patent, the rubber molding elements 27 [on the car] *are first removed* in order order to make room for the flap member."

Indeed, in some cases, the "replaced" top infringed different claims of the Mackie-Duluk patent than had been infringed by the original structure. These many changes made by petitioners, while always involving the unique Mackie-Duluk fabric shape, went far beyond mere restoration to operativeness, and constituted clear reconstruction rather than merely repair of the combination.

In short, the instant case can hardly provide a vehicle for determination of the restated question presented by the Government; for the facts of record are at such variance with those assumed in the question, that the Government's question can never be reached.

The Government has suggested no workable test to be substituted for that previously laid down by this Court in *Wilson* v. *Simpson*, 9 How. 109, and in *Heyer* v. *Duplicator Mfg. Co.*, 263 U.S. 100. Insofar as the Government's presently proposed restatement (U.S. Memo. 10), that "reconstruction of a patented machine or combination comprised of unpatented components is to be limited to true reconstruction of the machine, that is, re-creating it after the machine, viewed as a whole, has been destroyed or has otherwise disintegrated," can be understood, it is clear that it would lead to absurd results. For example, a wooden house of completely new structure, supported on an entirely conventional stone foundation (wood having a normal and anticipated life shorter than stone), could be razed to the foundation and thereafter completely rebuilt, even with significant alterations; and under the suggested test this would represent no more than a "repair" of the house.

The possible situations which might arise are, indeed, as varied as the different combinations of structures (or different materials having different wearing properties) which might be fabricated. The almost infinite factual distinctions which could appear for consideration emphasize that the only rational way of approaching the problem is precisely the way sanctioned by this Court, and adopted by the courts below, i.e. the application of common sense to the specific facts, with each case being limited to its own facts pretty much as an individual instance (Pet. 31).

IV. THE DECISION BELOW IS NOT IN CONFLICT WITH ANY RULINGS OF THIS COURT

In each of the "extension of monopoly" and "tie-in" cases cited (U.S. Memo, 3, 6-7) by the Government (*Motion Picture Patents Co.* v. *Universal Film Co.*, 243 U.S. 502; *Carbice Corp.* v. *American Patents Corp.*, 283 U.S. 27; *Mercoid Corp.* v. *Mid-Continent Corp.*, 320 U.S. 661; *Leitch Mfg. Co.* v. *Barber Co.*, 302 U.S. 458; *Morton Salt Co.* v. *G. S. Suppiger Co.*, 314 U.S. 488; *B.B. Chemical Co.* v. *Ellis*, 314 U.S. 495), the patentee was actually manufacturing and/or selling unpatented articles and sought to eliminate his competition through use of a patent. This is not the case here. *Respondent does not manufacture or sell anything.* This Court has itself recognized the factual distinction thus presented; see *Automatic Radio* v. *Hazeltine Research*, 339 U.S. 827, 831.

Respondent's only affirmative action in this entire matter has been to seek enforcement of its patent rights against a defendant who has stubbornly refused a license, a defendant who has not only violated the contributory infringement provisions of 35 U.S.C. § 271 (c), but who has also violated the direct infringement provisions of 35 U.S.C. § 271(a). Such legal action by a patentee, having no other recourse, was never condemned in any of the decisions cited, just mentioned; and indeed 35 U.S.C. § 271(d)(3) [Pet. 19] expressly states that such legal action against a direct and contributory infringer does *not* constitute an "illegal extension of the patent right." Again, therefore, the principles of the cases cited by the Government, and their proper application, is not in dispute; and the sole distinction is factual.

CONCLUSION

For the foregoing additional reasons, it is respectfully submitted that this petition for a writ of certiorari should be denied.

ELLIOTT I. POLLOCK
PAUL V. POWER
Attorneys for Respondent

February 1960.

APPENDIX 1

Testimony of H. Shapiro, September 22, 1959, and November 13, 1959.

Accounting Transcript 186:

"Q. [Mr. Pollock] I understand that you have recently stopped making tops of the Mackie-Duluk shape. Is that correct?

A. [H. Shapiro] That is correct.

Q. When did this top manufacture cease?

A. It has ceased within the period of Judge Aldrich's decision, where he did not grant us a rehearing. The Court of Appeals did not grant us a rehearing of the case.

Q. Was it a week ago or so?

A. Approximately a week ago.

Q. Approximately a week ago. Up until that time you were manufacturing and selling tops with the Mackie-Duluk shape? Is that correct?

A. That is correct.

Q. What is the new shape you are using?

A. Snap fasteners on the outside.

Q. Do you have any idea how these are selling?

A. I checked the first day that we shipped a few of them out and there has not been any repercussions. In fact, we had one or two of our accounts that commented on them and claimed that they could do an easier installation because they did not have to crawl inside the car."

Accounting Transcript 187:

"Q. Now, was the change made to the Part 232?

A. Yes.

Q. You changed your No. 232 completely, then, to the snap fastener as well?

A. That is correct.

Q. The other parts that are listed in the Court's Interlocutory Decree, have they been changed as well?

A. Yes, they have.

Accounting Transcript 516:

"Q. [Mr. Wolf] Is this a top for the new style?

A. [H. Shapiro] The only difference between this and the other label are initials "NS" printed on the label or adjacent to the label on our boxes.

Q. This is to identify—

A. New Style, meaning outside installations.

Q. Do you use this on all the types you are now selling, that very same numerical number that was considered infringing?

A. Yes, every top going out is marked with that and the construction of the top is changed.

Mr. Wolf. I offer that.

The Witness. In fact, our new catalog shows—it will be ready in a week or two—we note as preceding the number an asterisk, and down at the bottom is marked 'New Style, outside installation.'

Q. Have you had any degree of success in selling these tops?

A. Yes, we have had quite a bit of success. In fact, we have some men that call and want to know if we can make all our late model tops with that so that the man does not have to crawl inside the car to do the installation, he can work completely outside."

APPENDIX 2

Court of Appeals, Brief for Defendants, Appellants (Petitioners Herein) pp. 23-25

Replacing Worn Fabric Tops Is a Permissible Repair Under the "Common Sense" Doctrine Established by the Supreme Court and Followed in This Circuit.

A number of cases have considered the problem of what constitutes permissible repair as compared with a non-permissible reconstruction of the patented combination. In many instances it is rather difficult to draw a line between permissible repair and unpermissible reconstruction. In considering these cases, courts have evolved several tests in attempting to properly classify acts as being permissible or not. The dominant view which is followed in this particular circuit was established by the Supreme Court in *Heyer* v. *Duplicating Mfg. Co.*, *supra* at 17, where the court applied what might be termed "a common sense" doctrine. In that case the court said:

> We have only to establish the construction of a bargain on principles of common sense applied to the specific facts . . . 263 U.S. at 102.

This doctrine has been carefully followed by this court where it stated in the leading case of *Goodyear Shoe Mach. Co.*, v. *Jackson*, *supra* at 18:

> A purchaser, then, may repair, but not reconstruct or reproduce, the patented device or machine. Repair is "restoration to a sound, good, or complete state after decay, injury, dilapidation, or partial destruction." Reconstruction is "the act of constructing again." Reproduction is "repetition," or "the act of reproducing."

* * *

These definitions are instructive in bringing home to the mind that repair carries with it the idea of restoration after decay, injury, or partial destruction, and that reconstruction or reproduction carries with it the idea of complete construction or reproduction over again.

But the difficult question still remains, what is legitimate repair, and what is reconstruction or reproduction as applied to a particular patented device or machine? When does repair destroy the identity of such a device or machine and encroach upon invention? At what point does legitimate repair of such device or machine end, and where does illegitimate reconstruction begin?

It is impracticable, as well as unwise, to attempt to lay down any rule on this subject owing to the number and infinite variety of patented inventions. *Each case, as it arises must be decided in the light of all the facts and circumstances presented, and with an intelligent comprehension of the scope, nature, and purpose of the patented invention, and the fair and reasonable intention of the parties. Having clearly in mind the specification and claims of the patent, together with the condition of decay or destruction of the patented device or machine, the question whether its restoration to a sound state was legitimate repair, or substantial reconstruction or reproduction of the patented invention, should be determined less by definitions or technical rules than by the exercise of sound common sense and an intelligent judgment.* (Emphasis added) 112 Fed. at 150.

While courts of other circuits have also discussed what constitutes the dominant element of the invention, most still apparently apply the rationale of the "common sense" doctrine. See *Landis Machine Co.* v. *Chaso Tool*

Co., 141 F.2d 800 (6th Cir.), *cert. denied*, 323 U.S. [illegible] (1944).

It is not clear what doctrine the district court applied in concluding that replacing worn fabric tops constituted reconstruction of the patented combination rather than permissible repair. Regardless of what doctrine is applied, its conclusion is unsound. The application of the "common sense" doctrine requires a review of (a) what Mackie and Duluk *claimed* as their invention in the light of the relevant prior art, (b) the normal expectation of vendors of convertible automobiles, (c) the normal expectation of purchasers of convertible automobiles, (d) the rewards already received by the plaintiff's assignor, (e) the fact that the fabric tops are frequently replaced, (f) the custom of the replacement trade in replacing the tops and, (g) that the fabric top itself is old and unpatentable.

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JAMES R. BROWNING, Clerk

No. 21

In the Supreme Court of the United States

OCTOBER TERM, 1960

ABO MANUFACTURING CO., INC., ET AL., PETITIONERS

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

BRIEF FOR THE UNITED STATES AS AMICUS CURIAE

J. LEE RANKIN,
Solicitor General,
ROBERT A. BICKS,
Assistant Attorney General,
CHARLES H. WESTON,
RICHARD H. STERN,
Attorneys,
Department of Justice, Washington 25, D.C.

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BRIEF FOR THE UNITED STATES AS AMICUS CURIAE

STATEMENT

Respondent instituted this proceeding by a complaint which charged petitioners with infringement and contributory infringement of a patent on a top for convertible automobiles. The patent covers the combination, in an automobile body, of a flexible top fabric, supporting structures, and a mechanism for sealing the fabric against the side of the automobile body in order to keep rain out of the car's interior. Tops embodying this patent have been installed in various models of convertible automobiles. The components of the patented combination, other than the fabric, normally are usable for the lifetime of the car,

To sanction such control would be to permit the patentee "to derive its profits, not from the invention on which the law gives it a monopoly, but from the unpatented supplies" necessary to its use or operation by the licensee or purchaser. See 243 U.S. at 517; 283 U.S. at 34.

The basic standard applied in *Wilson* was restated by Judge Learned Hand in *United States* v. *Aluminum Co. of America*, 148 F. 2d 416, 425 (C.A. 2): "The [patent] monopolist cannot prevent those to whom he sells from * * * reconditioning articles worn by use, unless they in fact make a new article." In the present case, the courts below, instead of applying this plain and practical test, have focused attention on operative facts not properly determinative of the question of permissible repair *versus* forbidden reconstruction. Thus the court of appeals, in summing up the issues, declared that the fabric portion of the top "is not a minor or relatively inexpensive component" of the patented combination, or a part of the invention which would expectedly wear out after a very short period of use, although its "expectable life span" is shorter than that of the other components (R. 655). The court concluded that, for these reasons, "an owner would [not] rationally believe that * * * he was making only a minor repair" in replacing the worn-out fabric, and that, instead, this "would be counted a major reconstruction" (*ibid.*). Respondent has urged (Br. in Opp.

3-4, 10-11) as an additional relevant factor the "essentialness" of the top fabric to the invention, *i.e.*, that the fabric's particular shape was the advance in the art which brought the combination up to the inventive level. The rule of law for which respondent contends, stated in terms most favorable to it, is this: When an element of a patented machine or combination is relatively durable (even though not so durable as the entire patented machine which the owner bought), relatively expensive, relatively difficult to replace, and an "essential" or "distinguishing" part of the combination claimed, replacement of that element, when it becomes unusable, constitutes infringing "reconstruction" and a new license must accordingly be obtained and another royalty paid to the patentee for the privilege.

But if anything is settled in patent law, it is that the grant in a combination patent covers only the totality of the elements recited in the claim, and that no element, separately viewed, is within the grant. See *Mercoid* decisions, quoted *supra* at p. 6 and n. 6. The basic fallacy in respondent's position is that it rests on according one element of the patented combination a role, with respect to reconstruction, distinct from (and presumably higher than) the other elements. Yet this Court has made it clear in the two *Mercoid* cases that there is no "essential" element

or "gist" of the invention in a combination patent (320 U.S. at 667, 684):

> That result may not be obviated in the present case by calling the combustion stoker switch the "heart of the invention" or the "advance in the art." The patent is for a combination only. * * *
>
> * * * * *
>
> The fact that an unpatented part of a combination patent may distinguish the invention does not draw to it the privileges of a patent. That may be done only in the manner provided by law. However worthy it may be, however essential to the patent, an unpatented part of a combination patent is no more entitled to monopolistic protection than any other unpatented device. * * *

In a combination patent, therefore, all components are equally a part of the whole, and are equally "essential." Maintenance of the "use of the whole," through replacement of an inoperative element, does not constitute reconstruction because that element is termed "essential."[15] Nor, by the same token, can

---

[15] This is the holding in *General Motors Corp.* v. *Preferred Elec. & Wire Co.*, 79 F. 2d 621, 623 (C.A. 2), involving the replacement of worn breaker arm and contact brackets deemed by the district court to be the "gist of the invention" involved. *F. W. Slocumb & Co.* v. *A.C. Layman Mach. Co.*, 227 Fed. 94, 97–98 (D. Del.), affirmed and adopted, 230 Fed. 1021 (C.A. 3), similarly denies that any single element of a combination is to be deemed the essential one. And in *Wilson*, this Court declared, "And it is no more than that [repair], though it shall be a replacement of an essential part of a combination." 9 How. at 123.

one element of a combination be raised to preeminence because its repair is costly or difficult, or because it is relatively durable. The proper test of reconstruction is, we believe, far more direct, and it looks to the combination as a whole rather than to its individual elements.

We submit that the decisions of this Court require the conclusion that reconstruction of a patented machine or combination comprised of unpatented elements is to be limited to true reconstruction of the machine, that is, "in fact make a new article" (*Alcoa; supra,* p. 12) after the machine, viewed as a whole, has been destroyed or has otherwise disintegrated. In order to call the monopoly conferred by the patent grant into play for a second time, there must indeed be a second creation of the patented *entity.* Mere replacement of individual unpatented parts one at a time, whether of the same part repeatedly or different parts successively, is no more than the lawful right of the owner to repair his property. Measured by this test, the replacement of the top fabric involved in this case must necessarily be characterized as "repair," and respondent must be denied the power to interfere with the dominion of the car owner over his property. The patent laws do not authorize and the policies of the general law do not permit such encroachment on the public domain.

but the fabric has a much shorter life; it suffers wear and tear, deteriorates in appearance, and is usually replaced after three or less years of use (R. 33–34, 655). The consequent replacement demand for fabric tops has given rise to a substantial industry, in which petitioner Aro Manufacturing Co. is perhaps the national leader (R. 34). Petitioners' business has included manufacture and sale of fabrics designed to fit the models of convertibles equipped with tops embodying the patented combination on which suit is brought (R. 33).

On appeal from a judgment holding that petitioners had infringed respondent's patent, the court of appeals stated that the "basic question" presented was whether petitioners' conduct constituted "making a permissible replacement of a part [the fabric] which expectedly became worn out or defective sooner than other parts of the patented combination" (R. 648–49), or whether such replacement constituted "a forbidden reconstruction of the combination" (R. 654). The court reached the latter conclusion and ruled that there had been patent infringement. It did so upon the ground that "the life of the fabric is not so short, nor is the fabric so cheap, that we can safely assume that an owner would rationally believe that in replacing it he was making only a minor repair to his top structure" (R. 655).

QUESTION PRESENTED

When a patented machine is sold by the patentee or his licensee, the purchaser is granted an implied license of free use. The patentee receives the lawful

reward for his patent monopoly from the profit opportunity afforded to him as sole maker and seller or from the royalties payable to him by those granted licenses to manufacture and sell. The question in this case which is of concern to the Government is the following: Whether the owner of a patent on a machine or combination comprised of unpatented elements is given the additional right to monopolize the sale of an element which has a substantially shorter life than the machine's other components and is accordingly replaced in ordinary course in order to preserve the continued utility of the device purchased. In the specific case here, does the car owner infringe (and the supplier contributorily infringe) the combination patent when he replaces the worn-out fabric of the patented convertible top by buying it from someone other than the patentee?[1]

INTEREST OF THE UNITED STATES

The foregoing question raises an issue respecting the relative scope of the patentee's monopoly and the public's rights comparable to the issues passed upon in such cases as *Motion Picture Patents Co.* v. *Universal Film Co.*, 243 U.S. 502; *Carbice Corp.* v. *American Patents Corp.*, 283 U.S. 27; *Mercoid Corp.* v. *Mid-Continent Co.*, 320 U.S. 661; *International Salt Co.* v. *United States*, 332 U.S. 392. In these and other cases, this Court has held that the patentee's monopoly is restricted to exclusion of others from

[1] This is a restatement of the third question presented by the petition for certiorari (at p. 3). We express no views on the other questions presented by the petition.

manufacture, sale and use of the patented invention itself, and that it does not embrace monopolization of unpatented material used in, or necessary to the use of, the patented invention. It need hardly be stated that numerous enterprises, both in the automobile field and in many others, manufacture and sell unpatented replacement parts and materials suitable for use in devices and machines which, in their totality, are covered by combination patents. The scope of the patentee's rights in relation to the activities of such enterprises has been a recurring question and one of significant interest throughout the industrial economy, and, in order to present to the Court what it believes to be the interest of the public in this question, the United States submits this brief, *amicus curiae*.

Our view, elaborated below, is that the holder of a patented machine or combination exhausts his patent rights when he or his licensee sells the machine covered by his patent, and that neither the purchaser nor the purchaser's supplier infringes the patent by replacement of an unpatented element which has become unusable in ordinary course in advance of other components of the combination. This is so, we submit, irrespective of the frequency with which such replacements must be made and irrespective of whether the replacement is relatively expensive or deemed to involve a major or essential component.

ARGUMENT

I. The patent does not claim the fabric top as the invention, and consequently the grant confers no monopoly over the fabric itself

The fabric top is an unpatented element of respondent's combination patent,[2] which covers only the combination of certain components, one of which is "a flexible top material."[3] Inasmuch as the patent makes no claim to invention based on the shape or pattern of the fabric top material employed, it is immaterial whether the shape is such that it might have been patentable.[4] The claim made in the patent is the sole measure of the grant.[5]

Since, as observed, the patentee never claimed the fabric shape alone and the fabric is no more than an unpatented element of the invention which was claimed, the patent confers no monopoly grant over it, and the patentee dedicated to the public whatever invention, if any, lay in the separate elements of the combination

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[2] Claims 1–9 of the patent each specifically begin: "In a convertible automobile body, the combination of * * *." Claim 10, in which the word "combination" is omitted, equally claims only a combination. See R. 594–595.

[3] Among the other elements in the claims are the automobile metal body structure or tonneau, a folding bow structure, a sealing strip, and a wiping arm. *Ibid.*

[4] We note that if the shape possessed such novelty as to rise to the inventive level, respondent could have secured a patent monopoly on the fabric shape by claiming the fabric top shape alone, instead of claiming (as it did) the combination of various associated elements. *Special Equipment Co.* v. *Coe*, 324 U.S. 370, 377.

[5] *Graver Mfg. Co.* v. *Linde Co.*, 336 U.S. 271, 277; *Universal Oil Co.* v. *Globe Oil & Refining Co.*, 322 U.S. 471, 484; *Milcor Steel Co.* v. *Fuller Co.*, 316 U.S. 143, 145–146.

claims. See *Pennock* v. *Dialogue*, 2 Pet. 1, 16; *McClain* v. *Ortmayer*, 141 U.S. 419, 423–424. In *Mercoid* v. *Mid-Continent*, *supra*, this Court said: "The patent is for a combination only. Since none of the separate elements of the combination is claimed as the invention, none of them when dealt with separately is protected by the patent monopoly." 320 U.S. at 667.[6]

From this conclusion, *i.e.*, that the fabric part of the top is an unpatented component of the patented combination, it follows that petitioners' manufacture and sale of the fabric is not a direct infringement under 35 U.S.C. 271(a). *Cimiotti Unhairing Co.* v. *American Fur Co.*, 198 U.S. 399, 410; *Eames* v. *Godfrey*, 1 Wall. 78, 79; *Prouty* v. *Draper*, 16 Pet. 336, 341; *U.S. Industries, Inc.* v. *Otis Engineering Co.*, 254 F. 2d 198, 203 (C.A. 5).[7] It is true that petitioners know that the purchasers intend to use the fabrics for replacement purposes on automobile convertible tops which are covered by the claims of respondent's patent and that this might be deemed contributory

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[6] See also *Mercoid Corp.* v. *Minneapolis-Honeywell Co.*, 320 U.S. 680, 684: "The fact that an unpatented part of a combination patent may distinguish the invention does not draw to it the privileges of a patent. That may be done only in the manner provided by law. However worthy it may be, however essential to the patent, an unpatented part of a combination patent is no more entitled to monopolistic protection than any other unpatented device."

[7] Section 271(a) states:

"Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent."

infringement under 35 U.S.C. 271(c)[1] *provided* such replacement by the purchasers is itself direct infringement under Section 271(a). However, since replacement of the fabric is not direct infringement, petitioners, as supplier of the replacement, cannot be guilty of contributory infringement. *RCA Mfg. Co. v. Andrea*, 79 F. 2d 626 (C.A. 2); *Bullock Elec. Co. v. Westinghouse Elec. Co.*, 129 Fed. 105 (C.A. 6). Mr. Justice Frankfurter stated in *Mercoid v. Mid-Continent*, "In a word, if there is no infringement of a patent there can be no contributory infringer" (320 U.S. at 677); and Mr. Justice Roberts also observed in that case that "if the purchaser and user could not be amerced as an infringer certainly one who sold to him * * * cannot be amerced for contributing to a non-existent infringement" (*id.* 674).[2]

Whatever changes in the law or inroads on the *Mercoid* doctrine were made by the passage of section 271(c), that section made no change in the obvious and fundamental precept that there can be no contributory infringement in the absence of direct in-

[1] Petitioners contend that the standards of 35 U.S.C. 271(c) are not met in this case, but for reasons set forth in the text we do not believe this question need be reached.

[2] Although these were dissenting opinions, there is nothing in the majority opinion remotely suggesting any disagreement with the proposition that there can be no contributory infringement in the absence of direct infringement.

fringement." Section 271(c), part of the Patent Code enacted in 1952, defines contributory infringement in terms of direct infringement—sale of a component of a patented machine or combination for use in an "infringement" of such patent. And Section 271(a) of the new Patent Code, which defines "infringement," left intact the entire body of case law on direct infringement. The reviser's note on this section specifically stated that it is "declaratory only." [11]

The crucial consideration, therefore, is whether the car owner infringes the combination patent when he replaces the worn-out fabric element of the patented convertible top of his car. We turn now to the question whether such replacement of a worn element of the combination by the car owner is infringing "reconstruction" or permissible "repair."

II. The monopoly conferred by the patent grant does not extend to what constitutes, under the facts here, repair or replacement of an unpatented component of a patented combination

The decisions of this Court, for the last forty years or more, have been unanimous in denying to the

[10] Section 271(c) declares:

"Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use *in an infringement of such patent*, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer." [Emphasis added.]

[11] "The prior statute had no section defining or dealing with what constitutes infringement of a patent," and section 271(a) was adopted "for completeness." Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. preceding § 1, at p. 51.

patentee the right to control manufacture or sale of unpatented products or parts used in connection with a patented machine. Although the legal problems are primarily ones of substantive patent law, it has been recognized that they must be resolved in relation to the provisions and policy of the antitrust laws. In the leading case in this field, *Motion Picture Patents Co.* v. *Universal Film Co.*, 243 U.S. 502, this Court held (p. 517) that the monopoly of a patent does not extend to licensing it upon the condition that the licensee purchase from the patentee unpatented materials necessary to the operation of the licensed patent, since to permit the patentee to "derive its profit, not from the invention on which the law gives it a monopoly but from the unpatented supplies with which it is used," is "wholly without the scope of the patent monopoly".[12] The Court then proceeded to quote the provisions of Section 3 of the Clayton Act, 15 U.S.C. 14, which prohibits sale or lease of goods, "whether patented or unpatented," on the condition or agreement that the purchaser or lessee not use or deal in goods of a competitor of the seller or lessor, and declared that this enactment "must be accepted by us as a most persuasive expression

[12] For subsequent applications of the Court's holding, see *Carbice Corp.* v. *American Patents Corp.*, 283 U.S. 27; *Leitch Mfg. Co.* v. *Barber Co.*, 302 U.S. 458; *Morton Salt Co.* v. *G. S. Suppiger Co.*, 314 U.S. 488; *B. B. Chemical Co.* v. *Ellis*, 314 U.S. 495.

of the public policy of our country with respect to the question before us."[13] *Id.* at 517–518.

This Court's decisions specifically dealing with repair of patented machinery by replacement of an exhausted, worn-out, or broken component are of an earlier vintage, but they, too, evidence an indisposition to extend the patent monopoly beyond the terms of the grant. *Wilson* v. *Simpson*, 9 How. 109, the leading case in this Court dealing with the distinction between legitimate repair or replacement of parts of a patented machine and forbidden reconstruction, concerned a patented planing machine, consisting of a combination of cutting knives with a pressure roller. The purchaser of the machine was held to have the right to replace the knives, which normally wore out after 60 or 90 days of use. The Court said that, although there is no right to "rebuild" a patented combination, the machine "exists" notwithstanding the fact that destruction or impairment of one of its elements renders it inoperative; and that, accordingly, replacement of a worn-out essential part is permissible restoration of the machine to the original use for which it was bought. 9 How. at 123. The Court explained further that it is "the use of the whole" of the combination which a purchaser buys,

[13] Cf. *Carbice Corp.* v. *American Patents Corp.*, 283 U.S. 27, 34 n. 4; *Morton Salt Co.* v. *G. S. Suppiger Co.*, 314 U.S. 488, 494; *Mercoid Corp.* v. *Minneapolis-Honeywell Co.*, 320 U.S. 680, 684; *International Salt Co.* v. *United States*, 332 U.S. 392, 396. In *Minneapolis-Honeywell*, *supra*, the Court said: "The legality of any attempt to bring unpatented goods within the protection of the patent is measured by the anti-trust laws not by the patent law".

and that repair or replacement of a damaged or destroyed part is but an exercise of the right "to give duration to that which he owns, or has a right to use as a whole" (*ibid.*)."

If the grant of a combination patent confers upon the patentee power to exercise dominion over replacement of a worn-out, unpatented part of the combination—a replacement which is necessary if the patented machine or combination is to remain operative and perform the function for which it was purchased—the patentee would be given the same kind of partial monopoly over unpatented materials held *not* to be within the legitimate scope of the patent monopoly in ***Motion Picture Patents*** and ***Carbice.***

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[14] None of this Court's later decisions in this field added to the exposition appearing in *Wilson* v. *Simpson*, *supra*, and the opinion in that case has long been recognized as the Court's authoritative expression on the distinction between rebuilding or reconstruction, on the one hand, and repair on the other. *Morgan Envelope Co.* v. *Albany Paper Co.*, 152 U.S. 425, and *Heyer* v. *Duplicator Mfg. Co.*, 263 U.S. 100, held that there is no infringement when the purchaser or licensee of a patented machine or combination replaces an element of the combination which has only a temporary period of usefulness, so that replacement is necessary for continued utilization of the rest of the machine or combination. These cases, on their facts, clearly came within the decision in *Wilson* v. *Simpson*. *Cotton-Tie Co.* v. *Simmons*, 106 U.S. 89, the only other repair-reconstruction case decided by this Court since *Wilson*, found infringement by one who bought up, as scrap metal, belt-buckle-ties (used for baling cotton) after the iron straps had been chopped in half to unbind the bales, and who then reconnected the severed straps in order to resell the units for further use in baling cotton. The notice placed on the ties, "Licensed to use once only," was deemed of importance by the Court. Cf. *Henry* v. *A. B. Dick Co.*, 224 U.S. 1.

CONCLUSION

The judgment of the court of appeals should be reversed.

Respectfully submitted.

J. LEE RANKIN,
Solicitor General.

ROBERT A. BICKS,
Assistant Attorney General.

CHARLES H. WESTON,
RICHARD H. STERN,
Attorneys.

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In the

Supreme Court of the United States

OCTOBER TERM, 1960

No. 21.

ARO MANUFACTURING CO., INC., ET AL.,

PETITIONERS,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.,

RESPONDENT.

BRIEF FOR THE PETITIONERS

DAVID WOLF,
Counsel for Petitioners
68 Devonshire St.
Boston 9, Mass.

Counsel,
CHARLES HIEKEN
GEORGE L. GREENFIELD

Bancroft Printing Company, Boston, Mass. — Law Printers

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Citations

Cases

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Individual Drinking Cup Co. v. *Errett*, 297 Fed. 733 ..

International Salt Co. v. *United States*, 332 U.S. 392 28,

Jones v. *Radio Corp. of America*, 131 F. Supp. 82 ....

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Landis Mach. Co. v. *Chaso Tool Co.*, 141 F.2d 800 ....

Leitch Mfg. Co. v. *Barber Co.*, 302 U.S. 458 .....

Mastro Plastics Corp. v. *NLRB*, 350 U.S. 270 26,

McClean v. *United States*, 226 U.S. 374 .....

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H.R. 5988, 80th Cong., 2d Sess. (1948)	32, 52
H.R. 7794, 82d Cong., 2d Sess. (1952)	30
H.R. 9133, 81st Cong., 2d Sess. (1950)	30, 38, 39
H. Rep. No. 1923, 82d Cong., 2d Sess. at 8 (1952)	30
Hart & Sacks, The Legislative Process 1411, 1413 (1958 offset ed.)	27
Hearings Before Subcommittee on Patents, Trademarks and Copyrights of the House Committee on the Judiciary, 80th Cong., 2d Sess., ser. 21 at 25 (1948)	51

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Hearings Before Subcommittee No. 4 of the House Committee on the Judiciary, 80th Cong., 2d Sess., ser. 21 (1950) 33, 34, 35, 36, 37, 38, 4

Hearings Before Subcommittee No. 3 of the House Committee on the Judiciary, 82d Cong., 1st Sess., Ser. 9 (1951) 39, 40, 41, 42, 43, 44, 45, 50, 61

Manual of Patent Examining Procedure (2d ed. 1953, rev. 1958) 16, 17

Memorandum of C. Murray Bernhardt to Chairman Bryson dated November 29, 1950 in File on H.R. 3866 in National Archives 3

Rich, *Contributing Infringement, in* DYNAMICS OF THE PATENT SYSTEM 333 (Ball ed. 1960) 4

S. Rep. No. 1979, 82d Cong., 2d Sess. at 9 (1952) 3

Turner, *The Validity of Tying Arrangements under the Antitrust Laws*, 72 HARV. L. REV. 50 (1958) 5

WEBSTER'S NEW COLLEGIATE DICTIONARY (1956) 45, 47, 4

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No. 21

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RESPONDENT.

BRIEF FOR THE PETITIONERS

Opinions Below

The opinion of the District Court (R. 33-41)* is reported at 119 U.S.P.Q. 122 and its opinion denying respondent's motion to supplement the pleadings is reported at 123

* The record before the Court includes the entire original record, excepting non-paper exhibits, certified to the Court of Appeals. Portions of this record have been printed in three volumes. Volumes I, II and III contain pp. 1-403, 405-622 and 623-56, respectively. Reference to this printed record is by "R.".

Counsels for petitioners and respondent have stipulated that either party may refer to unprinted portions of the certified record. The unprinted transcript of testimony at the trial consists of eight volumes. The pages contained in each volume are as follow: I, 1-165; II, 166-307; III, 308-450; IV, 451-559; V, 560-680; VI, 681-821; VII, 822-969; and VIII, 970-1089. Reference to this transcript is by "Tr.".

U.S.P.Q. 340. The opinion of the Court of Appeals (R. 647-655) is reported at 270 F.2d 200, 122 U.S.P.Q. 536.

Jurisdiction

The judgment of the Court of Appeals was entered on August 31, 1959 (R. 656). A petition for rehearing filed September 9, 1959 was denied on September 15, 1959. *Ibid.* The petition for certiorari was filed December 11, 1959 and was granted February 29, 1960. *Ibid.* The jurisdiction of this Court rests on 28 U.S.C. § 1254(1).

Questions Presented

The Mackie-Duluk patent in suit relates to convertible-type automobile folding tops with an improved automatic sealing arrangement at the rear for minimizing rain water leakage. Each claim to this improvement recites a combination of a convertible top fabric, supporting structures, and a mechanism for automatically effecting a seal of the fabric against the inside of the automobile body as the top is raised to prevent water from entering the interior of the automobile. The convertible top fabric alone is not claimed as an invention in the patent. The petitioner makes, sells and installs only convertible top fabrics which replace worn fabrics in convertible automobiles. The questions presented are:

1. Whether the contributory infringement provisions in 35 U.S.C. § 271 authorize the patentee to prevent the sale of the unpatented top fabrics, each top fabric being an essential element of the patented combination especially cut and intended for use in convertible automobiles having the patented combination.

2. Whether the owner of a convertible automobile purchased from a manufacturer who has been released from liability for infringement of the patent for a combination, thereafter infringes the patent by replacing the worn fabric with one made by a replacement top fabric manufacturer who does not pay royalties to the patentee.

3. Whether the patent is misused when the owner of two combination patents covering convertible automobile automatic folding tops assigns a territorial grant limited to Massachusetts under only the patent in suit to a newly-formed corporation just before the latter brings suit while the owner continues to receive royalties under both patents for the sale of replacements for worn unpatented convertible top fabrics.

4. Whether article I, section 8 of the Constitution authorizes Congress to enact legislation granting the patentee the right to a limited monopoly over the unpatented top fabrics intended for use as a part of the patented combination when the top fabric itself is not an invention.

Constitutional Provisions Involved

The Congress shall have Power . . . To promote the Progress of Science and useful Arts by securing for limited Times to Authors and Inventors, the exclusive Right to their respective Writings and Discoveries. U. S. Const. art. I, § 8.

Statutory Provisions Involved

The statutory provisions involved are 35 U.S.C. Sections 103, 112, 271 and 282 of the patent laws and 15 U.S.C. Sections 1-3, 7, 14, and 15 of the antitrust laws. 69 Stat.

282 (1955), 26 Stat. 210 (1890), 38 Stat. 731 (1914). They are printed in Appendix A, *infra*, pp. 76-80.

Statement

The Mackie-Duluk Patent No. 2,569,724 in suit was issued on October 2, 1951 to General Motors Corporation (Pl. Ex. 1; R. 104, 593). The patent is entitled CONVERTIBLE FOLDING TOP WITH AUTOMATIC SEAL AT REAR QUARTER. It relates to a convertible-type automobile folding top with an improved automatic sealing arrangement to minimize water leakage. Each claim in the patent is to a combination shown in Fig. 1 of the patent (R. 589) including, a folding bow structure **1** supported on an automobile body **4**, flexible top material **20** supported by the folding bow structure **1** and extending downwardly at the sides toward the rear where the lower portion **28** of the flexible top material is connected to a rain trough **22**, and a wiping arm **10** operatively connected to the folding bow structure so that it rises from the position outlined by dashed-dotted lines to press the flexible material **20** into sealing contact with an inside surface of the body when the top is raised as shown in Fig. 2 of the patent. *Ibid.* No claim in the patent covers the flexible top material alone (R. 594-95).

General Motors Co. 1950-53 models and Ford Motor Co. 1952-54 models of convertible-type automobiles, include as original equipment the combination claimed in the Mackie-Duluk patent (R. 111-12, 24).

The flexible top material, or fabric, is usually replaced every three years or even oftener. Thus the normal life of the fabric is several times less than that of the car (R. 33). Car manufacturers themselves have little interest in either manufacturing or replacing the top fabrics. Consequently, there has grown up a sizeable independent replacement top

fabric industry of which petitioners are in Massachusetts, and perhaps nationally, leaders. The petitioners make, sell and install the fabric but do not manufacture, or install any metal parts, components or adjuncts. Unlike the fabric, all such metal parts normally last the life of the car (R. 34).

Respondent, Convertible Top Replacement Co. acquired a Massachusetts territorial grant in the Mackie-Duluk patent ten days before bringing suit (R. 7, 1). Automobile Body Research Corporation, the respondent's assignor, retained the remaining rights in the Mackie-Duluk patent (R. 7) and all the rights in the Ackermans Patent No. 2,549,154 (Def. Ex. GG; R. 267, 567-78; Pl. Ex. 9a, Tr. 14, R. 473) covering automatic folding top assembly combinations also alleged to infringe the Mackie-Duluk patent (R. 31-32, 473-74). Automobile Body continued to receive royalties on replacement top fabrics made specifically for 1950-53 General Motors cars and 1952-54 Ford Motor cars (R. 32). Automobile Body had acquired the Ackermans patent (Wright Dep. Ex. 4; Tr. 879, R. 617) shortly after being organized (R. 101) following a holding in a suit brought by Ackermans that General Motors was liable for infringing the Ackermans patent.[1]

Several transactions involving the transfer of rights under these patents followed the conclusion of that suit. General Motors assigned the Mackie-Duluk patent to Automobile Body and retained a royalty free license under this patent (Def. Ex. CC; R. 241, 509). General Motors also agreed to pay Automobile Body royalties under the Ackermans patent for the sale of replacement top fabrics (R. 31). The top fabric is not separately claimed in the Ackermans patent (R. 576-78).

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[1] *Ackermans* v. *General Motors Corp.*, 202 F.2d 642 (4th Cir.); *cert. denied*, 345 U.S. 996 (1953) reversed the Maryland District Court's finding of lack of invention. 108 F. Supp. 368 (D. Md. 1952).

Automobile Body signed an agreement with Ford Motor Co. on July 21, 1955. In it, Automobile Body released Ford and users of its products of all claims that Automobile Body then had or might have against it or them for infringement of the Ackermans and Mackie-Duluk patents arising out of the manufacture, use or sale of devices disclosed in these patents and manufactured before December 31, 1955, other than the "replacement top fabrics" licensed under a separate paragraph of the agreement (Def. Ex. DD; R. 241, 510-11). Under this separate paragraph, Ford also agreed to pay royalties to Automobile Body under both patents for the sale of "replacement top fabrics which, if sold without the patent owner's consent, would constitute contributory infringement . . . under 35 United States Code, § 271" (R. 511-12). Automobile Body believed that it had the right to consider the replacement top patented and intended that the release granted to users of Ford Motor Company cars run out "when the original fabric wears out and is replaced." (Deposition of William D. Hall, July 3, 1958, p. 109; Tr. 880-84).

Later Automobile Body licensed Atlas International, a nationally prominent manufacturer of replacement top fabrics, under both patents to sell replacement top fabrics on condition that Atlas pay a royalty on the sale of each replacement top fabric for use in 1950-54 General Motors cars, 1952-54 Ford Motor Company cars, 1953 Chrysler Corporation cars and "any model of car after the 1955 model where the manufacturer of the car marks one or more of the above patent numbers on new cars of that model or pays royalty on the replacement top fabrics that it sells for that model" "without regard to whether such top is covered by either of said patents" (Wright Dep. Ex. 4, Tr. 879, R. 617-18).

Petitioner Aro Manufacturing Co. was first charged with contributory infringement of both patents in a letter dated

January 2, 1954 from counsel for Automobile Body (Pl. Ex. 9a; Tr. 14, R. 473-74). Aro changed its fabric construction after consultation with its counsel and through its counsel refused to accept an offer for a license to sell replacement fabrics (Pl. Ex. 9d; Tr. 14, R. 475-76).

On April 5, 1956 respondent Convertible Top Replacement Corporation was organized as a Maryland corporation (R. 264, 6, 634). On April 17, 1956 Automobile Body assigned respondent a territorial grant under the Mackie-Duluk patent only, restricted to Massachusetts (R. 7). Ten days after this assignment and twenty-two days after its incorporation, respondent commenced this action on April 27, 1956 (R. 1).

The residential address of Elliott I. Pollock, counsel for respondent, (1959 Washington Metropolitan Area Telephone Directory 955) the business address of respondent (R. 264, 635) and the address of Vivian L. Pollock, respondent's president and one of its three stockholders (R. 264, 635), are the same. Counsel for respondent, is in the same law firm with William D. Hall, counsel for Automobile Body (Pl. Ex. 9a, Tr. 14, R. 473-74; Dep. of William D. Hall p. 105, Tr. 880-84). Respondent has derived no income from the patent in suit (R. 264, 635) nor from any other source (R. 264, 628, 635-36).

The jurisdiction of the District Court was invoked because the case arose under the patent laws of the United States (R. 6). The District Court found the Mackie-Duluk patent infringed by replacing only the worn top fabrics and contributorily infringed under 35 U.S.C. § 271(c) by selling the replacement top fabrics specially cut and intended for use in the automobiles incorporating the patented combination as original equipment (R. 42-43). The District Court ruled that replacing the worn top fabric was not a permissive repair (R. 39). Misuse was not found (R. 33 n.1).

The Court of Appeals affirmed in an opinion discussing only paragraph (c) of 35 U.S.C. § 271 without mentioning the *Mercoid* cases[2] decided by this Court, cases decided in other circuits interpreting the contributory infringement provisions of section 271, or the legislative history.

In considering whether replacing the worn fabric was an infringement, the Court of Appeals distinguished the *Morgan Envelope* case[3] decided by this Court by saying:

> Since the element replaced by the defendant-appellants was a patented component of the Mackie-Dulu combination, the cases . . . upon which they rely, are not in point, for the elements replaced by the defendant in those cases, the roll of toilet paper and the abrasive stone, respectively, were not patented elements of the devices covered by the patents there in suit" (R. 651 n.2).

The Court of Appeals said that the top fabric itself was covered by the patent (R. 651). While the opinion states that the patentees achieved their objective by devising a patentable *combination* of elements (R. 650), it also states:

> . . . It is true that the District Court found that it was not new to bring "the fabric from outside the tonneau at the rear quarters, inside." But it found that the patentees were the first to extend the flaps down far enough so that their bottom lines were at the axis of rotation of the bows and to show that there the fabric could be permanently attached to the bows and the tonneau without ripping when the top was lowered or raised, and that therein lay the patentable novelty of the patentee's fabric (R. 651).

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[2] Mercoid Corp. v. Mid-Continent Inv. Co., 320 U.S. 661 (1944); Mercoid Corp. v. Minneapolis-Honeywell Regulator Co., 320 U.S. 680 (1944).

[3] Morgan Envelope Co. v. Albany Paper Co., 152 U.S. 425 (1894).

Summary of Argument

The scope of monopoly rights granted by respondent's combination patent is defined by its claims. *Motion Picture Patents Co.* v. *Universal Film Mfg. Co.*, 243 U.S. 502, 510 (1917). Since the top fabric alone is not separately claimed, it is unpatented. Respondent's combination patent confers no monopoly rights over the unpatented top fabric though it is one element of the patented combination, *Carbice Corp.* v. *American Patents Dev. Co.*, 283 U.S. 27 (1931), specially designed for use in the patented combination and having no other actual commercial use. *Mercoid Corp.* v. *Mid-Continent Inv. Co.*, 320 U.S. 661 (1944). The purchasers and users of unpatented top fabrics are not infringers of respondent's combination patent, and petitioners are not liable for contributory infringement in selling top fabrics to such purchasers and users. 35 U.S.C. § 271 (1952).

A whole title of the United States Code is devoted to obtaining and enforcing patent rights. 35 U.S.C. §§ 1-293 (1952). It provides for the establishment of the Patent Office. 35 U.S.C. §§ 1-14. It requires examination of each application, 35 U.S.C. §§ 131-135, by Patent Office technically and legally qualified experts for compliance with formal requirements, 35 U.S.C. §§ 111-122, and standards of patentability, 35 U.S.C. §§ 100-104, before a patent is granted. 35 U.S.C. § 131.

The statute requires the applicant to particularly point out and distinctly claim the subject matter which he regards as his invention. 35 U.S.C. § 112. To interpret the contributory infringement provisions of section 271 to extend the coverage of a combination patent over one of the separate elements in the combination is inconsistent with the requirements for distinctly claiming the alleged invention and subjecting it to examination by the technically and legally qualified experts in the Patent Office. The court

below erred in construing these provisions as extending respondent's patent monopoly over a combination to the unpatented top fabrics used in the combination. The purpose of these provisions is to prevent a substantive infringer from escaping the consequences of infringement by an overly technical interpretation of the patent claims. Monopoly rights over the top fabrics could have been obtained only in the manner required by the statute. *Mercoid Corp.* v. *Minneapolis-Honeywell Regulator Co.*, 320 U.S. 680, 684 (1944).

Respondent has no right to force the owner of a convertible automobile to discontinue use of the machine when the original top fabric wears out. *Wilson* v. *Simpson*, 50 U.S. (9 How.) 109 (1850). Nor can respondent or its assignor condition the original sale of the machine on the user of the machine buying replacement top fabrics from a source designated by respondent or its assignor. Clayton Act § 3, 38 Stat. 731 (1914), 15 U.S.C. § 14 (1958); See *United States* v. *Univis Lens Co.*, 316 U.S. 241, 251 (1942). The patentee's reward comes from the profit or royalty associated with the initial sale of each patented combination, but he is not entitled to an additional royalty thereafter when one of the unpatented parts of the combination is replaced. *Morgan Envelope Co.* v. *Albany Paper Co.*, 152 U.S. 425, 432 (1894). Therefore, the owner of a convertible automobile covered by respondent's combination patent does not become an infringer by replacing the worn fabric, and petitioners cannot be amerced as contributory infringers for selling, advertising or installing unpatented replacement fabrics. 35 U.S.C. §271.

It is difficult to conclude that respondent was formed for any other purpose than to bring this suit. It was formed 22 days before bringing suit and received a territorial grant limited to Massachusetts in only the patent in suit ten days before suit was brought. Meanwhile, its assignor continued

to receive royalties for the sale of unpatented replacement fabrics under both the patent in suit and a related patent while escaping the responsibilities of a party under the Federal Rules of Civil Procedure to make all relevant information readily available. See FED. R. CIV. P. 26(d)(2), 33 and 34. The conduct of respondent and its assignor is far below the high standards which a federal court requires of one seeking to enforce the federally granted privileges of a patent. 35 U.S.C. § 282(1); *Precision Co. v. Automotive Co.*, 324 U.S. 806 (1945). Respondent is barred from maintaining this action by reason of its unclean hands.

The top fabric alone is not an invention because a change of form or size in a thing is an insufficient change to meet the constitutional standard of invention. *Hill v. Wooster*, 132 U.S. 693, 700-01 (1890). The Constitution authorizes Congress to grant the inventor exclusive rights to his discovery for a limited time. U.S. CONST., art. I, § 8. Hence, the construction of the court below affording monopoly protection over a part of the discovery is unconstitutional, *Mercoid Co. v. Mid-Continent Inv. Co.*, 320 U.S. 661, 680 (1944). (dissenting opinion) (dictum), because the top fabric alone is not an invention.

Argument

I.

THE TOP FABRICS ARE NOT PATENTED. THE STATUTORY PROVISIONS ON CONTRIBUTORY INFRINGEMENT DO NOT AUTHORIZE THE OWNER OF A COMBINATION PATENT TO EXTEND HIS MONOPOLY TO UNPATENTED PARTS USED IN THE COMBINATION.

This Court has held that a patent on a combination does not cover one of the separate unpatented parts which make up the combination, even though that part is essen-

tial to the combination and its addition to the combination represents the point of novelty; and that one who supplied such unpatented part, even though it was not a common article of commerce and was expressly designed for use in the patented combination, could not be held as a contributory infringer. *Mercoid Corp.* v. *Mid-Continent Inv. Co.*, 320 U.S. 661 (1944). And the attempt to exercise monopoly control over such unpatented parts was held to be a misuse of the combination patent subjecting the patentee to liability for violating the antitrust laws. *Ibid.*

We believe that a logical analysis of the Patent Act of 1952[4] supports a conclusion that the holding in *Mercoid* applies whenever the owner of a combination patent attempts to extend his legal monopoly to restrain competition in any single unpatented part, regardless of whether the part is an invention which could have been patented at the time the application for the combination patent was filed. If the inventor wants monopoly control over a part used in the combination, he must apply for a patent for that part "in the manner provided by law." *Mercoid Corp.* v. *Minneapolis-Honeywell Regulator Co.*, 320 U.S. 680, 684 (1944).

The instant case involves basic questions concerning the relationship between the patent and antitrust laws, particularly with respect to the scope of the immunity from the prohibitions of the antitrust laws which the patentee receives from the patent grant. The antitrust laws condemn activities which tend to lessen competition in commerce, for restrictions on competition prevent the public from obtaining the benefits of better products and services at lower costs resulting from the efforts of sellers to outperform each other and thereby capture more consumer dollars in a free market. On the other hand, the grant of a patent

[4] 35 U.S.C. §§ 1-293.

gives the patentee the right to exclude all competition in the patented invention. In other words, the federally granted privilege to exclude competition in a product is conditioned upon the product being both patented; that is, covered by a claim in an issued patent, and patentable; that is, an invention.

An article, machine or process is patentable only if it meets the constitutional[5] and statutory[6] standards of invention. But even if it is patentable, no monopoly rights attach unless it is patented. And it is not patented unless described by all the language in an issued patent claim[7] after examination[8] by an expert Patent Office[9] Examiner who approves a grant of a patent covering the subject matter defined by the claims only when the patent application meets the formal and substantive requirements of the patent laws.[10]

The preceding brief discussion introduces the statutory environment surrounding the infringement provisions of 35 U.S.C. § 271. An understanding of the elaborate examining operation which Congress authorized in Title 35 of the United States Code is important for properly determining the purposes and scope of the contributory infringement provisions of section 271 in paragraphs (b) and (c) and the provisions of paragraph (d) defining some situations in which a patentee is not subject to a charge of having misused his patent. While only paragraph (c) was cited by the courts below (R. 38, 648, 652), respondent has as-

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[5] Hill v. Wooster, 132 U.S. 693, 701 (1890); Thompson v. Boisselier, 114 U.S. 1, 11 (1885); A. & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 155 (1950) (concurring opinion).

[6] 35 U.S.C. § 103 (1952), *infra*, 76-77.

[7] Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502, 510 (1917).

[8] 35 U.S.C. §§ 131-132 (1952).

[9] The provisions authorizing the Patent Office operation are 35 U.S.C. §§ 1-14 (1952).

[10] 35 U.S.C. §§ 100-104, 111-121 (1952).

serted rights under paragraphs (a) and (b) (Respondent's Brief in Opposition pp. 4-7). Respondent also suggests that this action to enjoin the sale of unpatented top fabrics is sanctioned by paragraph (d) (Reply Brief for Respondent to the United States Memorandum p. 4).

Therefore, we shall discuss why we believe the petitioners have not directly or contributorily infringed respondent's combination patent by selling or installing unpatented top fabrics. A corollary of this discussion is that paragraph (d) does not excuse respondent or its assignor from the consequences of using combination patents to restrain competition in unpatented replacement top fabrics. That petitioners do not contributorily or directly infringe will be better understood by positively stating what seems to be the proper scope of these provisions. And the proper scope of the provisions become clearer after considering the overall statutory plan for obtaining and enforcing patent rights in the light of the constitutional purpose to promote the progress of the useful arts.[11]

II.

The Grant of a Patent Is Conditioned Upon Meeting Statutory Requirements. Congress Delegated the Responsibility of Issuing Patent Grants to the Technically and Legally Qualified Experts In the Patent Office Only After An Examination Finding That These Requirements Have Been Met.

The exclusive right which the Constitution authorizes Congress to secure to inventors exists only because Congress has acted to secure that right. It therefore follows that the granting of patent rights are subject to the inventor complying with the conditions established by Congress. *Pennock* v. *Dialogue*, 27 U.S. (2 Pet.) 1, 16-17 (1829).

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[11] See *Supermarket*, *supra* note 5.

Congress enacted 35 U.S.C. §§ 1-293 to set forth the plan for receiving and enforcing patent rights when the constitutional and statutory standards for patentability are met and the conduct of the patentee does not otherwise bar him from exercising these rights.[12] Congress delegated primary responsibility to the Patent Office for granting a patent only when the procedural and substantive requirements of the statute are satisfied. The statute even provides for judicial review of Patent Office decisions refusing to grant the patent rights sought by an applicant.[13]

The substantive standards and the statutory plan condition the grant of a patent on the subject matter being new, useful and representing a patentable departure over what was known before, the previously known subject matter being the prior art defined in the statute.[14] A patentable departure is that change which would not have been obvious to one having ordinary skill in the field of the subject matter sought to be patented and knowing all the prior art.[15] The role of this hypothetical "man skilled in the art" is initially filled by a Patent Office Examiner who is technically qualified in the subject matter which he examines. He makes a determination of the obviousness of the subject matter sought to be patented after conducting an extensive search of Patent Office records[16] for prior related domestic patents, foreign patents and printed publications.

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[12] Unenforceability is a defense to an infringement suit. 35 U.S.C. § 282(1), (1952). It was added by a Senate amendment, 98 CONG. REC. 9323 (1952), and approved by the House. *Id.* 9451.

[13] 35 U.S.C. §§ 141-146 (1952).

[14] 35 U.S.C. § 102 (1952).

[15] 35 U.S.C. § 103 (1952) *infra*, 76-77.

[16] 35 U.S.C. §§ 1, 8, 9, 13 (1952). These provisions authorize maintenance of records and a scientific library, classification of publications to facilitate determining with accuracy the novelty of inventions for which patent applications are filed, and exchange of patents with foreign patent offices.

The statute establishes procedures to facilitate determining whether the requirements of the statute have been met. The applicant is required to file a specification in which he describes the principles of his invention and an example of a useful device which incorporates these principles with sufficient clarity to enable a person of ordinary skill in the field of the subject matter to actually build the device and benefit from the disclosed principles after the patent monopoly has expired.[17]

The applicant is required to define what he regards as his invention in claims appended to the specification.[18] These claims are nothing more than a word picture of what the applicant regards as his invention. Since the claims in an issued patent define the scope of the patent monopoly, the applicant normally tries to use terms in his claim sufficiently broad to describe all possible structure which would incorporate his inventive principles.

The claims initially presented by the applicant define the area of prior patents and publications which is searched by the Patent Office Examiner.[19] Many Examiners convert

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[17] 35 U.S.C. § 112 (1952), *infra*, 77.

[18] *Ibid.*

[19] The *Manual of Patent Examining Procedure* (2d ed. 1953, rev. 1958) [hereinafter referred to as M.P.E.P.] consists of 216 pages of instructions which guide the Examiners in determining whether the substantive and procedural requirements for obtaining a patent have been met by the patent application. Examination is required by the provisions of 35 U.S.C. § 131 (1952).

The *Manual* states:

> The examination is to ascertain two things:
>
> 1. Is the applicant the first inventor of a patentable invention?
> 2. Has he taken the necessary steps to obtain a patent?
>
> M.P.E.P. ¶ 701.

The 236 rules of practice in patent cases guide applicants and their attorneys who seek patent protection. 35 U.S.C. §§ 1.1-1.352 (1958).

The *Manual* directs the Examiner to search for material pertinent to the subject matter as claimed, or that may in the future properly be claimed in the application. M.P.E.P. ¶ 904.01 (d).

the word picture in a claim into a sketch.[20] The sketch is then compared with drawings in prior patents and publications to help the Examiner uncover pertinent prior art.

If only a combination of elements is claimed as the invention, such as the combination claimed by Mackie and Duluk, the Examiner directs his search toward finding old combinations which are fully or nearly described by the broad terms in the originally presented claims. He would normally not conduct a search to see if any of the individual elements of the claimed combination were shown in the prior art unless an individual element were itself separately claimed.

After completing his search, the Examiner rejects those claims which fully or nearly describe prior art.[21] The applicant then has an opportunity to persuade the Examiner that the claims describe an invention over the prior art uncovered by the Examiner. Usually the applicant also cancels claims and changes the wording of others to narrow the scope of what he regards as his invention and patentably distinguish his invention over the prior art.

If the wording of a claim does not define with particularity what the applicants regards as his invention, the Examiner will reject the claim as indefinite, as was done during the prosecution of the Mackie-Duluk application (Pl. Ex. 2; R. 104, 419, 437), until the applicant amends the claims to eliminate the indefiniteness, as the General Motors attorneys did in order to obtain the allowance of the claims (Pl. Ex. 2; R. 104, 451-59).

If an applicant for a patent on a combination discloses but does not claim a novel part in an application, the Examiner does not ordinarily compare the unclaimed part with the prior art to determine whether the part is an invention.

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[20] M.P.E.P. § 904.01 (a).
[21] M.P.E.P. § 707.07 (d).

The Examiner does not approve the grant of a patent unless the invention is disclosed in such clear terms that anyone skilled in the art can practice the invention and the claims define the inventive subject matter with particularity.[22] Hence, he cannot approve the grant of a patent covering a novel part which is not claimed as an invention.

This examination in the Patent Office is most important for it is the first and probably only opportunity for an unbiased person who has the technical skills required to evaluate whether the alleged invention is sufficiently disclosed and represents a patentable departure over the prior art. The expert witnesses who testify in a court action challenging the validity of a patent normally slant their testimony to favor the party for whom they testify. The judge is generally not an expert in the art related to the subject matter in issue and unless a special master is appointed, thereby increasing the cost of litigation, the merit of the patented subject matter as an invention is never evaluated by a disinterested expert after the Patent Office grants the patent.

III.

The Grant of the Patent Covering the Combination Including the Top Fabric Is Not the Grant of a Patent for the Top Fabric Alone Because Mackie and Duluk Did Not Fulfill the Requirements of the Statute for Separately Patenting the Top Fabric. This Patent Confers No Limited Monopoly Rights In Unpatented Top Fabrics Used In the Combination.

The entire file history of the Mackie-Duluk patent shows not even one claim directed to the top fabric alone (Pl. Ex.

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[22] 35 U.S.C. § 112 (1952), *infra* 77.

2, R. 104). During the course of the prosecution the General Motors attorneys who prosecuted this application said: "the whole combination is new and inventive." (Pl. Ex. 2, R. 104, 447), and

> "The real invention is fastening the folding material considerably below the top of the tonneau and then using a wiping arm automatically operated by the bow structure for wiping the inside of the folding material as the top is raised and pressing it against the top of the tonneau (*Id.* 445).

In arguing the validity of the patented combination over the prior art Ackermans patent, Mr. Pollock said:

> . . . [T]here is the important distinction that in Mackie-Duluk, the fabric extends down into the trough and is permanently attached to it . . .
>
> I will further note that in the Mackie-Duluk structure there is what we call a wiper arm. This wiper arm exerts pressure on the fabric or at least restricts the inward movement of the fabric. This becomes very important under actual operating conditions since this of itself prevents the top material at the rear quarter from being inside or from flapping about, due to wind forces or other forces which might be applied (R. 301).

The first time the respondent ever contended that the top fabric itself was an invention was in a footnote of the brief filed by respondent in the Court of Appeals (Brief for Appellee p. 8 fn.).

If an applicant discloses but does not claim patentable subject matter in an application which matures into a patent, that subject matter is unpatented. It may be freely used by the public just like any other unpatented subject

matter. *Special Equipment Co.* v. *Coe*, 324 U.S. 370, [illegible] (1945); *Rowell* v. *Lindsay*, 113 U.S. 97, 101 (1885); *Cox Planter Patent* 90 U.S. (23 Wall.) 381, 224 (1874). Thus, even if the top fabric itself were an invention, the patentee receives no grant to a monopoly over the fabric when it is not separately claimed. For as this Court said in *Mercoid*

> The patent is for a combination only. Since none of the separate elements of the combination is claimed as the invention, none of them when dealt with separately is protected by the monopoly. 320 U.S. at 667

and

> The fact that an unpatented part of a combination patent may distinguish the invention does not draw to it the privileges of a patent. That may be done only in the manner provided by law. However worthy it may be, however essential to the patent, an unpatented part of a combination patent is no more entitled to monopolistic protection than any other unpatented device . . . [A] patent on a combination is a patent on the assembled or functioning whole, not on the separate parts. 320 U.S. at 684.

We believe that if Mackie and Duluk had wished to draw the privileges of a patent to the top fabric, they should have done so in the manner provided by law by claiming the top fabric separately, describing and illustrating it fully,[23] and submitting it to examination by the Patent Office Examiner.

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[23] Most applications require a drawing. See 35 U.S.C. § [illegible] (1952). Rule 83 of the Patent Office Rules of Practice in Patent Cases reads as follows:

> **Content of Drawing.** The drawing must show every feature of the invention specified in the claims. When the invention consists of an improvement on an old machine the drawing must

IV.

The Provisions on Contributory Infringement Apply to Prevent in Substance the Patented Invention from Being Unfairly Appropriated, but They Do Not Permit the Patentee to Misuse a Combination Patent by Specifying the Source of Any of the Separate Unpatented Parts Which Make Up the Combination.

As will be developed below, we believe that the provisions of 35 U.S.C. § 271 (c)[24] on contributory infringement, relax the requirements that the patentee claim the subject matter he seeks to monopolize but only to the extent necessary to prevent injustice which would result from an over-technical reading of the patent claims. The patentee can then exclude the sale of certain subject matter which is technically unpatented if:

(1) Such subject matter being sold is in substance the combination of elements claimed with the exception of an unimportant background element;

when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith. 35 U.S.C. § 113 (1958).

Evidently Mackie and Duluk and the Patent Office regarded the top fabric as old structure, for the drawing shows only a fragment of the top fabric (Pl. Ex. 1, R. 104, 589, 591), this fragment being "so much only of the old structure as will suffice to show the connection of the invention therewith."

[24] Paragraph (c) reads:

> Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

(2) The seller knows that the user will assemble the sold elements with the background element to complete the patented combination and thereby directly infringe the patent;

(3) Such subject matter was fairly subjected to examination by a Patent Office expert and found to meet the statutory and constitutional standards of invention; and

(4) Such users, the direct infringers, are so numerous and the infringing use by each so limited that suing and or licensing each direct infringer is impractical.

From our understanding of case law codified by section 271(b), paragraph (b)[25] would seem to authorize the owner of a patent to enjoin one who actively induces infringement by supplying infringers of a patented process with the complete means for practicing the method defined by the claim to the patented process if direct infringers are so numerous and infringement by each so limited that suing and or licensing each direct infringer is impractical. We also understand this paragraph as authorizing the patentee to take action against a corporate officer who actively induces infringement of a patent by the corporation under his control where direct action against the corporation is impractical. For example, the corporation may have no assets.

The provisions of paragraphs (b) and (c) might also be applicable where one sells all the elements of a patented combination in kit form with instructions to individua

[25] Paragraph (b) reads:

Whoever actively induces infringement of a patent shall be liable as an infringer.

users on assembling the elements to form the patented combination.

However, paragraphs (b) and (c) define contributory infringement in terms of infringement and there can be no contributory infringement without an infringement. Paragraph (a)[26] defines infringement in terms of making, using and selling the patented invention. If a user purchases a patented machine covered by a combination patent and manufactured by one who is released from liability for infringement by the patent owner, the user receives an implied license of use.[27] As will be developed below, we believe that the patentee has no right to tie the grant of this implied license to use to a condition that the user replace worn unpatented parts of the machine with replacement parts purchased from a source designated by the patentee. And the owner who is expressly or impliedly licensed to use a machine covered by a combination patent does not infringe the patent when he replaces or has replaced a worn unpatented part. It therefore follows that one who sells replacements for the worn unpatented parts cannot be answered as a contributory infringer.

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[26] Paragraph (a) reads:

> Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent.

[27] See *United States* v. *Univis Lens Co.*, 316 U.S. 241, 251 (1942) where Mr. Chief Justice Stone said in a unanimous opinion of the Court:

> Our decisions have uniformly recognized that the purpose of the patent law is fulfilled with respect to any particular article when the patentee has received his reward for the use of his invention by the sale of the article, and that once that purpose is realized the patent law affords no basis for restraining the use and enjoyment of the thing sold. *Adams* v. *Burke*, *supra*, [17 Wall.] 456; *Keeler* v. *Standard Folding Bed Co.*, 157 U.S. 659; *Motion Picture Co.* v. *Universal Film Co.*, 243 U.S. 502; and see cases collected in *General Pictures Co.* v. *Electric Co.*, 305 U.S. 124, 128, n.1.

We believe that paragraph (d)[28] does not sanction the use of a combination patent to foreclose competition in the patented parts used in the machine covered by the combination patent. On the other hand, if the patentee has a claim covering the combination making up the machine and another claim covering the part, he does not misuse the patent by seeking to exclude competition in the part, even if the claim to the part is found to be invalid. He is then only exercising monopoly control over a patented part. We also think that a patentee does not misuse a patent by trying to monopolize the sale of the patented invention minus some minor element recited in the claim and later added by an infringing user. This excuse from misuse would also seem to apply to the patentee trying to enjoin one who supplies an infringer with the complete means and instructions for infringing a patented process.

In other words, we believe that the test for determining whether a single patent is misused revolves around the scope of the patent claims. If the subject matter sought to be monopolized is described completely or very closely by all the language in a patent claim, there is no misuse even if the claim is held invalid and or not infringed. But if the subject matter sought to be monopolized is not described completely or very closely by all the claim language, the patent is misused and the patentee is subject to the consequences of having violated the antitrust laws.

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[28] Paragraph (d) reads:

> No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having done one or more of the following: (1) derived revenue from acts which if performed by another without his consent would constitute contributory infringement of the patent; (2) licensed or authorized another to perform acts which if performed without his consent would constitute contributory infringement of the patent; (3) sought to enforce his patent rights against infringement or contributory infringement.

We have interpreted paragraphs (b), (c) and (d) in the light of the legislative purpose in enacting the provisions on contributory infringement. One purpose of these provisions is to prevent the use of overly technical interpretations of the patent claims as a tool for sanctioning a substantive infringement where it is impractical to sue and or license direct infringers. A complementary purpose is to prevent a combination patentee from extending his monopoly over the combination to embrace unpatented parts.

We believe that legislative purpose should be determined by referring to:

1. The words of the statute being interpreted;[29]
2. Related statutory[30] and constitutional[31] provisions and their purposes;
3. Changes in the language of the statute as enacted from the language as originally presented and the reasons for the changes;[32]
4. Reports of the legislative committee responsible for recommending passage of the statute to the legislature;[33]
5. Statements by the legislator who sponsored the legislation;[34]

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[29] United States v. American Trucking Ass'ns, 310 U.S. 534, 543 (1940).

[30] Fourco Glass Co. v. Transmirra Products Corp., 353 U.S. 222, 228 (1957). See also Mr. Justice Frankfurter, *Some Reflections on the Reading of Statutes*, 47 COLUM. L. REV. 527 (1947).

[31] *E.g.*, Trade-Mark Cases, 100 U.S. 82 (1879); Brown v. Duchesne, 60 U.S. (19 How.) 183, 195 (1856).

[32] United States v. Great Northern Ry. Co., 287 U.S. 144, 155 (1932); United States v. Pfitsch, 256 U.S. 547, 551 (1921).

[33] Cole v. Young, 351 U.S. 536, 549 (1956); McClean v. United States, 226 U.S. 374, 380 (1912).

[34] Duplex Printing Press Co. v. Deering, 254 U.S. 443, 475 (1921).

6. Statements by members of the responsible legislative committee;[35]

7. Statements before the responsible legislative committee by persons responsible for language in the statute.[36]

All of these factors are available for consideration in interpreting the contributory infringement provisions.

This Court has long recognized that the provisions of a statute should be interpreted so as to effectuate the purpose of the legislature.[37] Once the purpose is found, the application of the statute to a given fact situation is greatly simplified. There are often many legislative materials available which are useful in determining the legislative purpose.

Of course, the language employed in the statute is an important guide to the purpose of the legislature. Where the *purpose* is so clear from the words of the statute itself, reference to other legislative materials, such as the legislative history, only confirms the purpose determined from examining the language alone.[38] But where purpose cannot be ascertained from the words alone, other indicia should be examined.[39]

Professors Hart and Sacks concisely stated the task of statutory interpretation:

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[35] United States v. CIO, 335 U.S. 106, 116-120 (1948); *cf.* Shapiro v. United States, 335 U.S. 1, 14 n.19 (1948).

[36] Fourco Glass Co. v. Transmirra Products Corp., 353 U.S. 222, 227 (1957); Cole v. Young, 351 U.S. 536, 550 (1956).

[37] Mastro Plastics Corp. v. NLRB, 350 U.S. 270 (1956); Stonite Products Co. v. Melvin Lloyd Co., 315 U.S. 561 (1942).

[38] Schwegmann Bros. v. Calvert Distillers Corp., 341 U.S. 384, 390 (1951).

[39] United States v. Dickerson, 310 U.S. 554, 562 (1940); United States v. American Trucking Ass'ns, 310 U.S. 534, 542-44 (1940).

In interpreting a statute a court should:

1. Decide what purpose ought to be attributed to the statute and to any subordinate provision of it which may be involved; and then

2. Interpret the words of the statute immediately in question so as to carry out the purpose as best it can, making sure, however, that it does not give the words either—

a. a meaning they will not bear, or

b. a meaning which would violate any established policy of clear statement.[40]

[A policy] . . . of clear statement call[s] for particular mention.

[It] . . . forbids a court to understand a legislature as directing a departure from a generally prevailing principle or policy of the law unless it does so clearly. This policy has special force when the departure is so great as to raise a serious question of constitutional power.[41]

We believe that the words of the provisions on contributory infringement will bear the meaning suggested by us in our proposed interpretation. *Infra*, 21-23. On the other hand, if these words are interpreted to allow the owner of a combination patent to extend his monopoly over the combination to cover unpatented parts used in the combination, the Court would be departing from the well-established policy developed in an unbroken line of cases from *Motion*

[40] HART & SACKS, THE LEGISLATIVE PROCESS, 1411 (1958 offset ed.).

[41] *Id.* at 1413.

Picture Patents to *International Salt*[42] that a patentee cannot use the leverage of a patent to monopolize unpatented parts, a policy approved by Congress as evidenced by pertinent portions of the legislative history reproduced below. In any event, we have so far been unable to find any statement by a member of Congress expressing disagreement with this wise policy. An interpretation of the words having the effect of conferring a limited monopoly over unpatented parts is also in conflict with other provisions of Title 35 specifying conditions which must be met before grant of a patent is approved. *Infra*, 14-18. And if the words are interpreted to give the patentee exclusive rights with respect to an unpatented part not an invention, we think that the provisions are unconstitutional. *Infra*, 69-74.

In expounding a statute, the Court must not be guided by a single sentence or part of a sentence, but must look to the provisions of the whole law, and to its object and policy.[43] Examining other provisions in Title 35 and looking to its object and policy is most important in interpreting the provisions of section 271 relating to infringement of patents. After Congress has provided for the establishment of a Patent Office staffed with technically qualified experts to examine a patent application for compliance with formal and substantive statutory requirements before granting a patent, we think it is wholly unreasonable to conclude that Congress enacted provisions on contributory

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[42] Motion Picture Patents Co. v. Universal Film Mfg. Co., 243 U.S. 502 (1917); Carbice Corp. v. American Patents Dev. Co., 283 U.S. 27 (1931); Leitch Mfg. Co. v. Barber Co., 302 U.S. 458 (1938); Morton Salt Co. v. Suppiger, 314 U.S. 488 (1942); B.B. Chemical v. Ellis, 314 U.S. 495 (1942); Mercoid Corp. v. Mid-Continent Inv. Co., 320 U.S. 661 (1944); International Salt Co. v. United States, 332 U.S. 392 (1947).

[43] Mastro Plastics Corp. v. NLRB, 350 U.S. 270 (1956); Pollard v. Bailey, 87 U.S. (20 Wall.) 520 (1874); Brown v. Duchesne, 60 U.S. (19 How.) 183, 194 (1856).

infringement which would have the effect of granting additional privileges to the owner of a combination patent permitting him to exercise monopoly control over an individual unpatented part of his combination without claiming that part and subjecting it to examination by the Patent Office.

Section 112 of the statute requires the patentee to claim his invention for a number of good reasons. We have already explained the important function of claims in defining the issues which the statute requires the Patent Office to resolve before granting a patent. *Infra*, 16-18. The claims also tell the public the arrangement of elements which may not be made, used or sold. If the patentee claims an element itself as an invention, the claims describe features of the element which distinguish it as an invention so that the public may avoid infringement by not making, using or selling an element with such features. *Motion Picture Patents Co.* v. *Universal Film Mfg. Co.*, 243 U.S. 502, 512 (1917). The claims also prevent the patentee from later asserting monopoly control over subject matter which he did not invent and submit for examination by the Patent Office. *Brooks* v. *Fiske*, 56 U.S. (15 How.) 211, 215 (1853).

Each of the claims in the patent in suit recites the combination of flexible top material, a folding bow mechanism, a wiping arm and the automobile body in a specified operative relationship. Thus, even if the top fabric itself were an invention, the patentee receives no monopoly rights over the fabric when it is not separately claimed.[44] And if the top fabric itself were an invention, it could have been claimed even if its only utility were in the patented combination.[45] The purposes of requiring the patentee

[44] Special Equipment Co. v. Coe, 324 U.S. 370, 376 (1945); Powell v. Lindsay, 113 U.S. 97, 101 (1885); Corn Planter Patent, 90 U.S. (23 Wall.) 181, 224 (1874).

[45] Special Equipment Co. v. Coe, *supra* note 44.

to claim his invention are frustrated if respondent and its assignor are allowed to use their combination patent to monopolize the unpatented top fabrics.

The legislative history supports our understanding that the provisions on contributory infringement are to be narrowly construed. Both House and Senate reports state that the purpose of this section in defining contributory infringement is to codify in statutory form principles of contributory infringement and that "[Section 271(c)]... is much more restricted than many proponents of contributory infringement believe should be the case."[46] And Congressman Bryson, the sponsor of H. R. 7794[47] which was enacted into Title 35, said in a speech to Philadelphia patent lawyers printed in the Congressional Record:

> In the section on infringement, an attempt has been made to write into the statute the judicial doctrine of contributory infringement in as noncontroversial a provision as possible. As you know, the Anti-Trust Division of the Department of Justice is opposed to this provision. It is their opinion that this provision extends the law of contributory infringement. The division contends that this places a limitation on the misuse doctrine, and they are opposed to any impairment thereof since the misuse doctrine is an important factor in the enforcement of the antitrust laws with respect to tying agreements. There also appears to be strenuous opposition to the provision by the manufacturers of parts. The subcommittee is cognizant of the difficulty of enforcing certain patents without

[46] S. Rep. No. 1979, 82d Cong., 2d Sess. at 9 (1952); H. Rep. No. 1923, 82nd Cong., 2d Sess. at 8 (1952).

[47] The provisions on infringement and contributory infringement in section 271; H.R. 7794; 82d Cong., 2d Sess. (1952); H.R. 3760, 82d Cong., 1st Sess. (1951); and H.R. 9133, 81st Cong., 2d Sess. (1950) are the same.

resorting to the doctrine of contributory infringement and the subcommittee believes that consideration of some form of this doctrine might be salutary. The real question we are faced with is the apparent controversial nature of this subject. As I stated earlier, this bill is planned to contain provisions on which there was substantial agreement. Whether this provision is substantially not controversial is questionable. However, the committee is presently studying the provision. I appreciate the task you members of the patent bar have had attempting to understand the versions of contributory infringement propounded by the courts. I am also aware of the abuse of the contributory infringement doctrine which the courts were trying to remedy, and that they eventually evolved the misuse doctrine to keep contributory infringement in line. It is that narrow area where contributory infringement may properly be applied that section 231 seeks to establish. However, I also understand that some very respectable authorities are of the opinion that there no longer is such doctrine in the law.[48]

The provisions in section 271 defining the liability of a seller of less than the whole of the patented combination were preceded by the provisions of section 3 of a bill originally endorsed by the New York Patent Law Association and the Hon. Giles Rich, then its vice president and now a judge on the Court of Customs and Patent Appeals. The original provisions read as follows:

> The sale of a component of a patented machine, manufacture, combination or composition, or a material or

[48] 98 Cong. Rec. A416 (1952).

apparatus for use in practicing a patented process, is especially made or adapted for use in an infringement of such patent, and not suitable for actual commercial noninfringing use, shall constitute contributory infringement. H.R. 3866, 81st Cong., 1st Sess. (1949); H.R. 5988, 80th Cong., 2d Sess. (1948).

Congressman Willis, presiding at hearings of the subcommittee which considered contributory infringement expressed what Congress was trying to do in enacting noncontroversial provisions on contributory infringement in a question put to John C. Stedman of the Antitrust Division of the Justice Department.

> Mr. Willis. Now would the situation be improved if we could find language to affirmatively define both . . . [contributory infringement and misuse] in such a way whereby the classic cases that we all agree with, the lamp case[49] and the dry ice case,[50] would be restored to our jurisprudence?
>
> Mr. Stedman. I am sure that it would be an improvement over the present bill, but I still think you would have difficulty in drawing that line. It is our view that the basic proposition that a person should not be able to use his patent to control commerce in an unpatented device whether it is adapted or not, is a sound proposition and should be retained in the law.
>
> . . . . . .
>
> Mr. Willis. I am sure that the proponents of the bill have no such thing in mind as doing away with the misuse doctrine. . . . [W]ould the effect of this bill be to disturb what I consider to be a very necessary

[49] Wallace v. Holmes, 29 Fed. Cas. 74 (No. 17,100) (D. Conn. 1871).

[50] Carbice Corp. v. American Patents Dev. Co., 283 U.S. 27 (1931).

doctrine, such as in the dry ice case? You can see danger there.[51]

The lamp case referred to by Congressman Willis was explained to the subcommittee by Judge Rich. The patent covered a kerosene lamp. It had a base in which the kerosene was placed. The base supported a brass burner mechanism which adjusted the wick up and down. Air vents were provided in the burner mechanism which supported a glass chimney. Judge Rich testified:

> . . . Now, when lamps were sold they were put on the shelves as articles of merchandise without chimneys, because chimneys were stocked in the store as separate items, being more or less perishable. . . .
>
> . . . The invention of the lamp, of course, was not in the base, which was nothing but a container for the kerosene, and it was not new, it was as old as the hills. But an improvement in the burner mechanism was new. But to describe a complete lamp you have to include the base and the chimney or it does not work. You cannot have a lamp with nothing but the burner mechanism, so these elements were in the claim. . . .
>
> . . . [T]he patent was on the complete lamp for the simple reason the claim described a complete lamp, but the inventive subject matter was in the burner mechanism.

Now the defendant said, "I have not infringed this patent because the claim of this patent includes the

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[51] *Hearings Before Subcommittee No. 4 of the House Committee on the Judiciary*, 80th Cong., 2d Sess., ser. 21 at 58 (1950) [hereinafter cited as *1949 Hearings*].

chimney as an essential element, and there is a rule in the patent law that the omission of an essential element from a combination voids the infringement. I just sell the base and burner. I do not infringe."[52]

Judge Rich continued:

How did the judge solve the problem? He did it just the way I think you would do it. He said this defendant has appropriated the invention and infringed the patent of this inventor and I am not going to let him get away with it because he leaves the chimney off.

What the judge said was this is a virtual infringement, and held the defendant liable.

Now, later on that type of a situation, instead of being called a virtual infringement, came to be called a contributory infringement; it was just a change of name.

Mr. [Congressman] BERNHARDT. What did the infringer sell exactly?

Mr. RICH. The entire kerosene lamp.

Mr. WILLIS. How can you apply the word "contributory" there? With the chimney left off, who is contributing to what?

Mr. RICH. Somewhere along the line there must be a direct infringement, and where does it take place? It took place in the home of the purchaser of that lamp when he took it home and put the chimney on it and the householder became the direct infringer.

Now, it is not practical in the infringement of patent rights of this character to go around suing every little farmer who has bought a lamp and has

[52] *1949 Hearings* 4.

taken it home and put a chimney on it. There was a certain inference that there was going to be an infringement as soon as that lamp was sold, was there not? That is typical of all of these contributory infringement cases of the type in which we wish to see the patentee given some remedy.[53]

Thus, the rule of the lamp case which Congressman Willis wanted to restore held that where the patented combination covered a number of elements arranged in a specified relationship, the seller of all the elements specified in the claim with the exception of a background element, but with the knowledge that the user would assemble these elements with the background element in a manner defined by the claim, was liable as an infringer where the numerous individual direct infringers, such as the lamp users, were too numerous to sue or license directly.

Judge Rich also explained the dry ice case to the subcommittee. He testified:

> . . . [T]he patent was on a transportation package for foodstuffs. It was a box made out of a cardboard with a heat insulating top. Food was packed in the box and in the center of the entire unit, buried in the food, usually ice cream, was a cake of solid carbon dioxide, which is variously known as dry ice or carbice . . . and the inventor of this transportation package obtained a patent on it. One of the elements of his claim was the solid dry ice cake, and he developed a method of doing business, the purpose of which was to prevent anybody from buying the solid carbon dioxide from his competitor, because he was in the business of manufacturing it.

[53] *Id.* 5.

> [The court said]: . . . We will deny recovery to this man because he is misusing his patent to try to monopolize an old unpatentable article with it.[54]

The subcommittee heard testimony on *Mercoid* by Judge Rich and Mr. I. E. McCabe, chief engineer and chairman of the board of the Mercoid Corporation.

In *Mercoid* the patent covered a combination, including a furnace, an electrically operated stoker, a room thermostat responsive to room temperature and a thermostat in the furnace. With only a room thermostat, the fire might become extinguished during mild weather because the room thermostat would not actuate the stoker. Adding the furnace thermostat eliminated this problem because the latter thermostat started the stoker when the furnace temperature became too low.

The patentee, Mid-Continent Investment Co., was a patent holding company. Its exclusive licensee sold furnace thermostats specially designed for use in the patented combination and not suitable for other actual commercial use.

Licenses to use the patented combination were conditioned upon purchasing the furnace thermostats from a source designated by the exclusive licensee of the patentee. Mercoid was offered but refused to take a license authorizing the sale of furnace thermostats not covered by the combination patent.[55]

Judge Rich testified:

> The defendant in that case made up a switch unit or assembly [the furnace thermostat] which was wired so that when you applied it to a furnace and connected

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[54] *Id.* 8.

[55] Mid-Continent Inv. Co. v. Mercoid Corp., 43 F. Supp. 692, 695 (N.D. Ill. 1942).

it up in accordance with the instructions, infringement [of the patented combination] necessarily resulted.[56]

The state of the business was such that one company made furnaces, another made electrical equipment, and thermostats, and plumbing contractors installed the whole thing. Where are you going to find a direct infringer, only in somebody's cellar. There is no practical way to enforce that patent, except through a suit for contributory infringement against the party who makes the thing which is essentially the inventive subject matter, which when put into use, creates infringement.

Mr. WILLIS. Well, the novel part of the patent in that case was the switch, was it not?

Mr. RICH. Yes, when applied to a furnace.[57]

It seems Judge Rich meant that the point of invention in the patented *combination* was adding another thermostat inside the furnace itself and connecting the furnace thermostat to the stoker to operate the latter when the furnace temperature became too low, thereby preventing the fire from going out. He did not suggest that the thermostat alone was an invention. Nor did he suggest that the patentee should be excused from patenting the furnace thermostat alone if that were the part he wished to monopolize.

Mr. McCabe testified that the thermostats in *Mercoid* were not inventions.[58] He recognized the consequences of the original provisions on contributory infringement when he testified:

. . . If you bring unpatented parts within the range

[56] *1949 Hearings* 10.
[57] *Id.* 11.
[58] *Id.* 42.

> of [a] patent, it would not be long before everybody would get busy to take advantage of it.[59]

which evoked the following comment from Congressman Willis:

> I would not vote for such a bill if it expressed that intent anyway.[60]

It thus seems clear that the subcommittee opposed statutory provisions which would allow the patentee to extend the patent monopoly afforded by his combination patent to cover unpatented parts. And the subcommittee twice refused to enact these provisions.

C. Murray Bernhardt, counsel to the subcommittee, sent the following memorandum dated November 29, 1950, and endorsed "No Action 12/4/50" to Congressman Bryson:

> Re: H. R. 3866, the "contributory infringement" bill
>
> This measure was the subject of extensive hearings during this and the preceding Congress. It is sharply controversial, and it is undoubtedly advisable to refrain from taking any action at this time, but to await further consideration next year when the subcommittee undertakes to deal with the revision and codification of the controversial aspects of the patent laws.
>
> (NOTE: H.R. 9133, the "non-controversial" patent revision bill, contains a watered-down provision on the subject of contributory infringement which the subcommittee may or may not elect to retain in the "non-controversial" bill to be introduced next year).[61]

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[59] *Id.* 46.
[60] *Ibid.*
[61] Memorandum in File on H.R. 3866 in National Archives.

The watered-down provision on the subject of contributory infringement in H. R. 9133 is in section 271. The provisions of this section appeared in the *Patent Law Codification and Revision*[62] as section 231. Section 3 of the original draft was changed to require that one could not be held as a contributory infringer unless the sold component constituted a material part of the invention. In addition, the clause excluding the sale of things "suitable for actual commercial noninfringing use" from being contributory infringement was changed to read "and not a staple article or commodity of commerce suitable for substantial noninfringing use".

The present provisions of 35 U.S.C. § 271(c) are reproduced below. Changes in section 3 of the original provisions are indicated by italicizing language added to the original provisions and bracketing language removed from the original provisions.

> [The sale of] *Whoever knowingly sells* a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, *constituting a material part of the invention,* [if] *knowing the same to be* especially made or adapted for use in [such process] an infringement of such patent, and not *a staple article or commodity of commerce* suitable for [actual commercial] *substantial* noninfringing use, shall [constitute contributory infringement] *be liable as a contributory infringer.*[63]

Mr. McCabe again voiced his objections to extending the patent monopoly to cover unpatented elements.[64] Judge

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[62] H.R. 3760, 82d Cong., 1st Sess. (1951).

[63] *Id.* § 231 (c).

[64] *Hearings Before Subcommittee No. 3 of the House Committee on the Judiciary*, 82d Cong. 1st Sess., Ser. 9 at 139 (1951) [hereinafter referred to as *1951 Hearings*].

Rich explained his understanding of the revised provisions to the subcommittee members when he testified:

> Whoever knowingly sells a component of a patented machine, manufacture, combination or composition, or a material or an apparatus for use in practicing a patented process—
>
> and note the next phrase—
>
> constituting a material part of the invention—
>
> that means part of the inventive contribution that the patentee made, something new that did not exist before that came from him, and that is an important limitation which is in here which is not in the old bills—
>
> especially made or especially adapted for use in an infringement of such patent—
>
> another prerequisite—
>
> and not a staple article or commodity of commerce suitable for substantial noninfringing use shall be liable as a contributory infringer.
>
> I think you would agree with me that . . . that is an exceedingly restricted provision.[65]

And Judge Rich further testified:

> . . . And the one thing we have definitely tried to do is to exclude the people who sell common articles of commerce, staples, things that had nothing to do with the invention, . . . even things especially adapted, as Mr. McCabe pointed out this morning, to fit things into other people's apparatus, unless they are a material part of the invention. And I think that Mr. McCabe has overlooked the fact that we have added those words to this statute.[66]

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[65] *1951 Hearings* 154.

[66] *Id.* 157.

Congressman Crumpacker wanted to know an example of a case of contributory infringement as defined by the statute. *Amalgamated Dental Co.* v. *William Getz Corp.*, 90 U.S.P.Q. 339 (N.D. Ill. 1951) was cited to the subcommittee members.[67] In that case, the patent related to a pliable material for use by dentists in making dental impressions. The claimed combination covered a number of specific chemicals dissolved in water. The defendant sold boxes having the different chemicals in proper proportion but in dry form. Users were instructed to dissolve the contents of the package in a prescribed quantity of water to provide the patented combination. Contributory infringement was found because the defendant was selling all the elements covered by the claim except the water, which was a background element, knowing that the purchaser of the packaged combination of chemicals would dissolve them in water to unite the chemicals to produce a composition covered by the claim. Thus, all of the elements of the patented combination were being sold with the exception of the single background element, the water, which was added by the directly infringing user. The particular combination of chemicals sold was fairly subjected to search by the Patent Office Examiner to see if bringing these chemicals together in fact represented an inventive departure over the prior art. Stated in other words, in substance the patented invention was being sold, but a technical interpretation of the patent claims prevented such sale from constituting a direct infringement because the packaged chemicals when sold were not united together in an aqueous solution as called for by the patent claims.

Chief Judge Barnes said:

Now, I do not see the wrong in this case which I saw

[67] *Id.* 155-56.

very clearly in the Mercoid case, and likewise saw very clearly in the Lecithin case.[68]

And, as I say, the best reason that has been suggested to me as to why the [misuse] rule does not apply is that water just constitutes the environment in which these chemicals perform,[69]

In discussing the case, the subcommittee members were led to believe that the sale of a single unpatented chemical for use in a combination patent was not contributory infringement under the provisions of the bill.[70] The colloquy between Congressman Rogers and Judge Rich illustrates this:

Mr. Rogers. Well, I take it, then, that this would include the chemicals that you are talking about, that are necessary in a dental case, that if I manufactured one

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[68] Judge Barnes was also the trial judge in *American Lecithin Co.* v. *Warfield Co.*, 42 F. Supp. 270 (N.D. Ill. 1941), *aff'd*, 128 F.2d 522 (7th Cir. 1942) and in *Mercoid Corp.* v. *Minneapolis-Honeywell Regulator Co.*, 43 F. Supp. 878 (N.D. Ill. 1942), *modified*, 320 U.S. 680 (1944) *reversing* 133 F.2d 811 (7th Cir. 1942).

[69] 90 U.S.P.Q. at 341; *1951 Hearings* 155.

[70] And the Eighth Circuit has so held where the patented combination was the single unpatented chemical dissolved in water and the chemical was sold by the alleged contributory infringer packaged with instructions to dissolve it in water and form the patented combination. *Dr. Salsbury's Laboratories* v. *I. D. Russell Co.*, 212 F.2d 414 (8th Cir.), *cert. denied*, 348 U.S. 837 (1954). The Eighth Circuit Court of Appeals unanimously rejected the argument of the appellant, represented by Judge Rich, that the provisions of section 271 overruled *Mercoid*.

The Fourth Circuit has held that the patentee could prevent the sale of unpatented magnets specially designed for use in dentures covered by his combination patent. *Freedman* v. *Friedman*, 242 F.2d 364 (4th Cir. 1957) *reversing*, 142 F. Supp. 426 (D. Md. 1956). The amount involved was so small that the appellees made no appearance. The Fourth Circuit Court of Appeals did not discuss *Mercoid* but appears to have relied upon *Henry* v. *A. B. Dick Co.*, 224 U.S. 1

of them, and Mr. Crumpacker manufactured another, and the chairman [Mr. Bryson] manufactured another, and you manufactured the fourth ingredient necessary to make this up, we are engaged in a business, probably making that particular chemical which we call a staple article.

Now, by virtue of the fact that the man has a patent on it, the rest of the world, if they want to, can go down here to the Patent Office and see that combination, and suppose that Mr. X then sees that combination and he then comes to me and the other manufacturers and buys in large quantities and proceeds to infringe the man's patent, and we know that when he buys it, he is going to use it for that purpose.

Mr. RICH. You and each of you, it seems to me, are

(1912) which was expressly overruled in *Motion Picture Patents*, 242 F.2d at 366.

The Fifth Circuit has applied paragraph (c) to allow a *design* patentee to prevent the sale of unpatented rack tops having portions similar to the upper portions of the patented design covering the ornamental design of a rack comprising the top and a matching base. *Henry Hanger & Display Fixture Corp.* v. *Sel-O-Rak Corp.*, 270 F.2d 635, 641-42 (5th Cir. 1959), *affirming* 159 F. Supp. 769 (S.D. Fla. 1958).

Judge Barnes, relying on cases and articles, without referring to the legislative history or considering the setting afforded by related statutory provisions, stated in a district court opinion that the purpose of Congress was to change the law in *Mercoid*. *Sola Electric Co.* v. *General Electric Co.*, 146 F. Supp. 625, 647 (N.D. Ill. 1956).

Judge Rich has stated that *Mercoid* was modified by the statute. Rich, *Contributory Infringement*, in DYNAMICS OF THE PATENT SYSTEM 333, 348 (Ball ed. 1960). However, he advised attorneys,

"In a *Wallace* v. *Holmes* type of situation be sure that you claim the burner by itself, without including a chimney or the base, if you can and if that is what your inventor invented." *Id.* 338.

We think that the statute requires claiming the invention sought to be monopolized. We don't think the holding in *Mercoid* was modified, for *Mercoid* recognized that a residuum of contributory infringement remained, and Congress agreed, enacting provisions to dispel doubts by some that the doctrine was dead. See *id.* 346; 98 CONG. REC. A416 (1952).

beyond question, specifically excluded by the language of paragraph (c).

Mr. ROGERS. Because we have a staple article or—

Mr. RICH. Yes; because what you are selling is not a material part of the thing which was invented, which was a *combination* of chemicals, which has to be brought together from the ordinary sources of those chemicals. (Emphasis added.)

. . . .

Mr. ROGERS. Well, you feel, when we sell a staple article or commodity of commerce, that any who have engaged in the business of handling those things, although we know the individual who purchased it is going to infringe a patent, that there would not be any liability on us, although we may have especially prepared that, or knew that it would be specially adapted for that purpose, that that would relieve the manufacturer from it?

Mr. RICH. I definitely do so feel. We definitely wrote this language to take care of the very situation which you have given us as an example: The chemical manufacturer who makes chemicals to order, knowing what is going to be done with them or not knowing what is going to be done with them.[71]

We do not see the logical difference between a specially prepared unpatented chemical known to be used in a patented combination and specially designed unpatented top fabrics known to be used in a patented combination. In short, we believe that it would be contrary to the purposes of the provisions on contributory infringement as understood by the subcommittee to hold that the patentee can prevent the sale of unpatented top fabrics to Ford and

[71] *1951 Hearings* 161-62.

General Motors for original installation as a part of the patented combination. The patentee's rights are solely against the maker, user and seller of his patented invention, not the seller of unpatented parts.

Congress evidently required a change in the original provisions in order to exclude the possibility that the owner of a combination patent could extend his monopoly to cover the sale of unpatented parts. It was an important purpose of the changes to insure that one would be amerced as a contributory infringer only if he is selling the "material part of the patented invention"; that is, all of the elements of the patented combination with the exception of a background element.

We stated above that the words of a statute should not be assigned a meaning which they would not bear. We recognize that a possible definition of the words "material part" is "an important single element" which the court below apparently assigned to these words. But an interpretation assigning the meaning "important (albeit unpatented) single element" to the words "material part" conflicts with the long established policy approved by Congress of preventing the patentee from extending his patent monopoly to cover unpatented parts.

The words "material part" will bear the meaning suggested by Judge Rich in discussing *Amalgamated* before the subcommittee.[72] That is, the whole patented invention is the group of elements operatively associated as specified in the patent claim. The "material part" is this group of elements, possibly without a background element, ready for being united to form the patented combination. And the dictionary lists "pertinent" as a synonym for "material"[73] and "less than the whole" as a synonym for "part".[74] This

[72] *Id.* 155-56.
[73] WEBSTER'S NEW COLLEGIATE DICTIONARY 518 (1956).
[74] *Id.* 612.

meaning of "material part" is consistent with the purpose of preventing one who appropriates in substance the patented inventioned from escaping the consequences of infringement without extending the monopoly granted by a combination patent to cover unpatented parts.

A proper cause of action for contributory infringement might exist under the Mackie-Duluk patent if an automobile manufacturer sold new convertible automobiles separate from the top fabrics and instructed the numerous dealers how to install the top fabrics to form the patented combination. The manufacturer would not be directly infringing because the whole patented invention calls for "the top material at the rear quarter extending down and secured to . . . [the body] panel on the inside and below the top of the metal body (Pl. Ex. 1; R. 104, 595, Claim 9); and the manufacturer would then be selling all the elements in the patented combination but without the attached top fabric called for by the claims.

Paragraph (c) excludes the sale of a "commodity of commerce suitable for substantial noninfringing use" from being contributory infringement. A district court has held that this exclusion applies to a separately patented hook fastener especially adapted for use in a patented combination of a fiber board secured to an automobile body with the hook fastener when the claims to the hook fastener alone were held invalid for lack of invention. The court considered the hook fastener as an unpatented article.[75] We see no logical reason for affording greater rights to the top fabric which was never claimed as an invention by treating it as if it were entitled to the privileges of a valid patent.

We think that the purpose of changing "suitable for

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[75] Gagnier Fibre Products Co. v. Fourslides, Inc., 112 F. Supp. 926, 932 (E. D. Mich. 1953) (alternate holding).

actual commercial noninfringing use" in the original provisions to "suitable for substantial noninfringing use" in the provisions finally enacted was to insure that the patentee could not extend his combination patent to cover unpatented parts merely because they were specially designed by reason of shape and dimensions for use in the patented combination. The exclusionary clauses in both the original and revised provisions included the word "suitable". This word is derived from the verb "suit" which bears the meaning "to fit or adapt to",[76] hence, "suitable" can bear the meaning "capable of being adapted to". Respondent's own expert testified that the reason a replacement top fabric from one car and model will not fit another car and model is "Because of the size and shape of the body shell." (R. 194). Both courts below disregarded the fact that "some of the fabrics manufactured by defendants for cars with Mackie-Duluk tops by happenstance may also fit some cars with other types of tops" because "they are admittedly purposely designed for, and advertised for, Mackie-Duluk tops" (R. 38) and that the top fabrics were capable of being adapted to "be applied in a noninfringing way" (R. 655, n.4). Had the court below followed the directions of the statute and looked to the suitability of the top fabrics for noninfringing use instead of the intended use, it would have found no contributory infringement.

The change of "actual commercial noninfringing use" to "substantial noninfringing use" would seem to be directed toward clarifying that an unpatented part specially designed for use in a patented combination was outside the scope of the combination patent monopoly. In most cases an unpatented part specially designed for use in a patented combination would be unsuitable for other actual commercial use by virtue of its special shape and size. The essen-

[76] P. 848 *supra* note 73.

tial nature of the specially designed part is that of similar parts of slightly different shape and dimensions which are themselves not subjects of a patent and may be used in a manner so as not to infringe the combination patent.

The word "substantial" means "of or pertaining to substance".[77] The word "substance" bears the meaning "characteristic components".[78] The dictionary states as an example, "The ideas are the same in substance".[79] We think that an unpatented part specially designed for use in a patented combination is the same in substance as any similar unpatented part of different shape and dimensions which the combination patentee would have no right to control. In other words, we believe that the word "substantial" must be interpreted so that there is no contributory infringement if the part in its essential nature is suitable for noninfringing use in order to accomplish the purpose of the change in language. The specially designed unpatented top fabrics are in their essential nature suitable for noninfringing use.

V.

Replacing the Worn Unpatented Top Fabric in a Patented Combination Sold With the Consent of the Patentee Is Not an Infringement of the Combination Patent. The Patentee's Reward From Each Patented Article Is Limited to the Profit or Royalty From the Initial Sale.

The respondent contends that petitioners are liable for selling top fabrics to replace worn ones in patented combinations originally installed in General Motors automobiles (R. 33) licensed under the patent (Def. Ex. CC; R. 241,

[77] Id. 845.
[78] *Ibid.*
[79] *Ibid.*

509) and in Ford automobiles owned by users who were released from all liability for direct infringement (Def. Ex. D[illegible]; R. 241, 510-11). The respondent takes the position that the license or release expires when the top fabric is replaced (Deposition of William D. Hall, July 3, 1958, p. 109; Tr. 880-84). Thus, the respondent regards the owner of a convertible automobile as a direct infringer as soon as he replaces a worn top fabric, unless the respondent's assignor receives a royalty on the sale of the replacement fabric. This result is in conflict with the apparent understanding of subcommittee members that the sale of replacements for worn unpatented parts would not constitute contributory infringement.

Judge Rich testified:

> There is another old doctrine of contributory infringement law under the Morgan Envelope case, which has always permitted the replacement of parts which are expected to be worn out or consumed in use, such as toilet paper in the holder, razor blades in a razor, cutters in a plane, and so on. That is still the law.[80]

The Court of Appeals in the case at bar distinguished *Morgan Envelope* by saying that the top fabric was a patented element of the patented combination while in *Morgan Envelope*, the oval toilet paper roll was not patented (R. 651 n.2). In fact, the oval toilet paper roll itself was patented, but the separate claim to the oval roll was held invalid.[81] We see no logical reason for giving greater rights to one seeking to monopolize replacement parts who has not separately claimed the part in a patent.

The following testimony during the 1951 Hearings re-

[80] *1949 Hearings* 20.
[81] 152 U.S. at 435.

lates to the applicability of statutory provisions to the sale of replacement parts.

> Mr. CRUMPACKER. We have received protests from manufacturers of replacement parts for such things as automobiles, farm tractors, and the like, who evidently feel that the language used in this H.R. 3760 would make them contributory infringers of patents on the original article, the tractor or something of that sort.
>
> Would you care to state your views on that subject, Mr. Rich?
>
> Mr. RICH. Those were the most vociferous objectors to the old bills on this subject. . . .
>
> If the part he is supplying is in substance the very thing which was invented, it seems to me personally, that he is an infringer, and he should not be let off on some little technicality that there is something minor in the whole apparatus that he is not supplying.[82]

Basically Judge Rich is suggesting that if in substance the patented invention, less a minor background element, is being sold, the seller is liable as a contributory infringer, regardless of whether it is sold for original installation or to replace a worn unit. But if we apply this standard to the case at bar, petitioners would not contributorily infringe because the petitioners do not supply the combination of the lower metal body structure, the folding bow structure supported by the tonneau and the wiping arm secured to a part of the movable bow structure and acting simultaneously with the bow structure to engage the inside lower portion. This combination which petitioners are not supplying can hardly be regarded as something minor in the whole apparatus.

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[82] *1951 Hearings* 153.

In a word, the automobile owner does not become an infringer by replacing a worn fabric. Since there is no infringement, petitioners cannot be amerced as contributory infringers for supplying the replacement fabric.

This reasoning applies to respondent's contention that supplying unpatented top fabrics with instructions for installing them as replacements for worn fabrics in convertible automobiles and advertising the replacement top fabrics constitutes contributory infringement under the provisions of section 271(b) which read:

> Whoever actively induces infringement of a patent shall be liable as an infringer.

Congressman Keating questioned the need for this provision, saying,

> We can strike it out and I believe not affect the existing law.[83]

Mr. Robert W. Byerly agreed stating that it was included for completeness.[84]

Although Mr. Byerly was in sympathy with the suggestion that a definition of contributory infringement be broadened to include "a thing intentionally made as a part of the combination to be used as a part of a combination" he said:

> . . . I question under the public feeling at present that could be done. . . . That goes further than our definition.[85]

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[83] *Hearings Before Subcommittee on Patents, Trademarks and Copyrights of the House Committee on the Judiciary*, 80th Cong., 2d Sess., ser. 21 at 25 (1948) [hereinafter referred to as *1948 Hearings*].

[84] *Ibid.*

[85] *Id.* 26. The stated purposes of the original provisions were set forth in the title: "A BILL to provide for the protection of patent rights where enforcement against direct infringement is impractical, to define

One of the purposes of revising the original provisions on contributory infringement was to prevent the patentee from extending his patent monopoly to unpatented parts. This purpose would be defeated if the seller of such unpatented parts were prevented from advertising the parts by specifying the model of the original equipment in which they fit and provide the automobile owners, or one hired by the owners, with instructions for installing the unpatented parts.

Had Ford or General Motors ordered top fabrics from petitioners for original installation, petitioners could hardly be considered to have induced these large corporations to infringe the patent. Moreover, the primary reason for having provisions on contributory infringement is for situations where action against direct infringers is impractical. It is certainly practical to sue or license Ford or General Motors. And respondent's assignor, Automobile Body, took direct action against General Motors and Ford for alleged infringement of its Ackermans and Mackie-Duluk patents (R. 30-32). Having once received a

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'contributory infringement', and for other purposes." H.R. 5988, 80th Cong., 2d Sess. (1948).

Paragraph (b) has been held to apply where one discloses confidential information enabling others to directly infringe. *Jones* v. *Radio Corp. of America*, 134 F. Supp. 82 (S.D.N.Y. 1955). It might also apply where one induces another to directly infringe by using an unlicensed patented machine, *Individual Drinking Cup Co.* v. *Errett*, 297 Fed. 733, 741 (2d Cir. 1924); and where one furnishes another with the complete means and instructions for directly infringing a patented process. *Trent* v. *Riston Iron & Locomotive Works*, 102 Fed. 635, 642 (9th Cir. 1900); *Metallizing Eng'ring Co.* v. *Metallizing Co.*, 62 F. Supp. 274 (S.D.N.Y. 1945).

Paragraph (b) might also be applied toward extending liability to corporate officers who consol a corporation which directly infringes. See, *e.g.*, *Dean Rubber Mfg. Co.* v. *Killian*, 106 F.2d 316, 320 (8th Cir. 1939); *Ferguson* v. *Ford Motor Co.*, 77 F. Supp. 425, 436 (S.D. N.Y. 1948).

We think that the patentee should always be required to proceed against the direct infringer unless he can show such action is impractical rather than merely inconvenient.

royalty on the sale of each patented convertible, neither respondent nor its assignor is entitled to a second royalty on the sale of each replacement fabric.

When the unpatented parts replace worn ones in patented combinations, we believe that there can be no form of contributory infringement because replacing a single worn unpatented part of a patented combination is not an infringement under the decisions of this Court and courts of appeals prior to the decision in this case.[86] Although reconstructing the patented invention after its useful life

[86] Wilson v. Simpson, 50 U.S. (9 How.) 109 (1850) (unpatented knife in patented planing machine); Heyer v. Duplicator Mfg. Co., 263 U.S. 100 (1923) (unpatented gelatin bands in patented duplicating machine); Goodyear Shoe Mach. Co. v. Jackson, 112 Fed. 146 (1st Cir. 1901) (unpatented cam in patented sewing machine); Electric Auto-Lite Co. v. P. & D. Mfg. Co., 109 F.2d 566 (2d Cir. 1940) (unpatented breaker arms, contact screws or brackets, springs, condensers, rotors, caps and coils in a patented automobile ignition system); American Safety Razor Corp. v. Fringe Brothers Co., 62 F.2d 416 (3d Cir. 1932), *cert. denied*, 289 U.S. 726 (1933) (unpatented razor blade in patented combination of blade and holder); Standard Stoker Co. v. Berkley Mach. Works & Fndry Co., 106 F.2d 475 (4th Cir. 1939) (unpatented repair parts for patented railroad locomotive stokers); Landis Mach. Co. v. Chaso Tool Co., 141 F.2d 800 (6th Cir.), *cert. denied*, 323 U.S. 720 (1944) (unpatented cutting tool, pins and bushings in patented combination of cutting tool, holder and die head); Micromatic Hone Corp. v. Mid-West Abrasive Co., 177 F.2d 934 (6th Cir. 1949) (unpatented abrasive stone in patented combination of stone and holder); Westinghouse Elec. Mfg. Co. v. Hesser, 131 F.2d 406 (6th Cir. 1942) (unpatented furnace grate members in a patented automatic furnace stoker); Williams v. Barnes, 234 Fed. 339 (7th Cir. 1916) (unpatented paper recording dial in patented watchman's registering clock); Morgan Gardner Elec. Co. v. Buettner & Shelburne Mach. Co., 203 Fed. 490 (7th Cir. 1913) (unpatented hollow washer and other parts for patented coal mining machine); Pyle Nat. Co. v. Oliver Elec. Mfg. Co., 281 Fed. 632 (8th Cir.), *cert. denied*, 260 U.S. 736 (1922) (unpatented repair parts for railroad locomotive steam driven patented electrical generating system); El Dorado Foundry, Mach. & S. Co. v. Fluid Packed Pump Co., 81 F.2d 782 (8th Cir.), *cert. denied*, 299 U.S. 560 (1936) (unpatented tubes in patented pumps); Morrin v. Robert White Eng'ring Works, 143 Fed. 519 (2d Cir. 1905) (single patentable but unpatented steam generating tube in patented combination of a group of like tubes in supporting cylinder).

as distinguished from that of a part has been exhausted[87] and rebuilding a patented combination whose useful life has not ended to increase its capacity[88] have been held to constitute infringement; replacing the top fabric is not an infringement because the useful life of the convertible mechanism is not exhausted nor is its functional capacity increased.

All the cases we know of have held that replacing a single worn unpatented part in a patented combination is not an infringement even though the part is separately claimed when the claim to the part has been held to be invalid as lacking invention.[89] Of course, if a replacement part is covered by a separate valid claim the part is patented and the patentee may properly exercise monopoly control over

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[87] Cotton-Tie Co. v. Simmons, 106 U.S. 89 (1882) (patented combination of tie and buckle whose useful life ends after a single use); Davis Elec. Works v. Edison Elec. Light Co., 60 Fed. 276 (1st Cir. 1894) (burned out patented light bulb); Hughes Tool Co. v. Owen, 123 F.2d 950 (5th Cir. 1941); Southwestern Tool Co. v. Hughes Tool Co., 98 F.2d 42 (10th Cir. 1938); Williams v. Hughes Tool Co., 186 F.2d 278 (10th Cir. 1950), *cert. denied*, 341 U.S. 903 (1951) (useful life of patented drill bit exhausted when teeth wear out).

[88] George Close Co. v. Ideal Wrapping Mach. Co., 29 F.2d 533 (1st Cir. 1928). (patented candy cutting machine reconstructed to cut larger caramels); Miller Hatcheries v. Buckeye Incubator Co., 41 F.2d 619 (8th Cir. 1930) (patented incubator reconstructed to increase its capacity).

[89] Morgan Envelope Co. v. Albany Paper Co., 152 U.S. 425 (1894) (separate claim to oval toilet paper roll invalid, patent covering combination of holder and roll not infringed by replacing roll); General Motors Corp. v. Preferred Elec. & Wire Corp., 79 F.2d 621 (2d Cir. 1935), *cert. denied*, 296 U.S. 655 (1936); *aff'd on rehearing*, 109 F.2d 615 (2d Cir. 1940) (separate claim to breaker arm rubbing block invalid, claim covering automobile electrical ignition system including breaker arm not infringed by replacing breaker arm with rubbing block); Payne v. Dickinson, 109 F.2d 52 (3d Cir.), *cert. denied*, 310 U.S. 637 (1940) (separate claim to hypodermic needle invalid, patent covering combination of syringe and needle not infringed by replacing needle).

It has been held that where the separate claim to the part is held invalid for failing to define the invention with particularity rather than for lack of invention, the patent on a combination including the part

the part even though it is used in a machine which is also patented.[9]

Both paragraphs (b) and (c) define contributory infringement in terms of infringement, defined in paragraph (a) as follows:

> Except as otherwise provided in this title, whoever without authority, makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent.

The owners of the Ford and General Motors automobiles having combinations covered by the Mackie-Duluk patent use the patented invention. But such use is with the authority of the patentee. Respondent has expressly released owners of Ford automobiles from liability for infringement (Def. Ex. DD; R. 241, 510-11) so long as they use the original top fabrics (Deposition of William D. Hall, July 3, 1958, p. 109; Tr. 880-84). And since General Motors reserved a royalty free license under the patent (Def. Ex. CC; R. 241, 509), owners of General Motors automobiles enjoy an implied license to use their automobiles. When the top fabric wears out, the respondent and its assignor claim a right to terminate that license of use unless the user purchases the replacement top fabric from a source designated by the patentee so that the licensing

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is infringed by replacing the worn part. *Trico Products Corp.* v. *Apco-Mossberg Corp.*, 45 F.2d 594 (1st Cir. 1930). The separate claim to a windshield wiper blade was held invalid for claiming function rather than structure, but a claim to the combination of blade and holder was held infringed by replacing the blade. This decision is distinguishable from the others in this note because the part itself appears to be an invention which the patentee tried to claim. But we question whether a court is authorized to grant monopoly rights over a single part which has not been claimed with the particularity required by the statute.

[9] Deering v. Winona Harvester Works, 155 U.S. 286, 302 (1894); Nat'l Malleable Casting Co. v. American Steel Foundries, 182 Fed. 626, 639 (D.N.J. 1910).

corporation receives a royalty on the sale of each unpatented replacement top. Sanctioning this conduct on the part of the respondent and its assignor is permitting the patentee to "derive its profit, not from the invention on which the law gives it a monopoly", but from the unpatented top fabrics with which it is used and is "wholly without the scope of the patent monopoly." *Motion Picture Patents Co.* v. *Universal Film Mfg. Co.*, 243 U.S. 502, 517 (1917).

Once the patented article is sold with the permission of the patentee, the patentee may not thereafter control the use or disposition of the article,[91] or condition its original use on the purchase of unpatented parts.[92] If this be true, we see no reason why the patentee should be able to condition continued use of a patented machine on the purchase of unpatented replacement parts from a source designated by the patentee, or force disuse because one of the unpatented parts of the patented machine requires replacement.[93]

VI.

Tying the Grant of a License Authorizing Use of a Patented Combination to the Purchase of Unpatented Replacement Parts From a Source Designated by the Patentee Violates the Antitrust Laws. The Violation Is Not Excused by 35 U.S.C. § 271(d).

Respondent and its assignor Automobile Body Research Corporation have in our view misused the Mackie-Duluk patent and the Ackermans patent in violation of the antitrust laws. Respondent and its assignor authorize sales of patented combinations by Ford and General Motors only

[91] Note 27 *supra*.
[92] Mercoid Corp. v. Mid-Continent Inv. Co., 320 U.S. 661 (1944).
[93] Note 86 *supra*.

on the condition that the purchaser of the automobile not use replacement top fabrics purchased from a competitor of those replacement top manufacturers designated by the patentee who pay royalties for the sale of the unpatented top fabrics, thereby substantially lessening competition in the replacement top fabric field and violating section 3 of the Clayton Act. The conspiracy between and the attempt by the respondent and Automobile Body to restrain trade in replacement top fabrics also violates sections 1-3 of the Sherman Act.

In *Mercoid*, this Court suggested that patent tie-ins were antitrust violations per se,[94] and *International Salt Co.* v. *United States*, 332 U.S. 392 (1947), appears to have decided for all practical purposes that patent tie-ins are illegal per se, for the Court said it was

> unreasonable, *per se*, to foreclose competitors from any substancial market.... The volume of business affected by these contracts [$500,000 worth annually] cannot be said to be insignificant or insubstantial and the tendency of the arrangement to accomplishment of monopoly seems obvious. 332 U.S. at 396.

In *Times-Picayune Publishing Co.* v. *United States*, 345 U.S. 594 (1953), this Court restated the law on tie-ins as follows:

> When the seller enjoys a monopolistic position in the market for the "tying" product, *or* if a substantial volume of commerce in the "tied" product is restrained, a tying arrangement violates the narrower standards expressed in § 3 of the Clayton Act because

[94] This is the view of Professor Turner. Turner, *The Validity of Tying Arrangements Under the Antitrust Laws*, 72 HARV. L. REV. 50, 52 (1958).

> from either factor the requisite potential lessening of competition is inferred. And because for even a lawful monopolist it is "unreasonable, *per se*, to foreclose competitors from any substantial market," a tying arrangement is banned by § 1 of the Sherman Act whenever *both* conditions are met.[26] 345 U.S. at 608-09,

citing a passage from *United States* v. *Griffith*, 334 U.S. 100 (1948).

In the latter case the Court said:

> [A person with an exclusive right] . . . does not usually violate § 2 of the Sherman Act unless he has acquired or maintained his strategic position, or sought to expand his monopoly, or expanded it by means of those restraints of trade which are cognizable under § 1 . . . [T]he use of monopoly power, however lawfully acquired, to foreclose competition, to gain a competitive advantage, or to destroy a competitor, is unlawful . . . If monopoly power can be used to beget monopoly, the Act becomes a feeble instrument indeed. 334 U.S. at 106-08.

We see no difference in principle between a manufacturing patentee using his patent to foreclose competition in an unpatented product which he manufactures and sells and a non-manufacturing patentee who uses his patent to foreclose competition with competitors of those who pay the patentee royalties for the sale of unpatented products.

The relevant market foreclosed to competition by respondent and its assignor is that for replacement top fabrics, for the District Court found:

> Car manufacturers themselves have little interest in manufacturing or replacing fabric tops. Consequently

> there has grown up a sizable independent top industry, of which defendants are locally, and perhaps nationally, leaders (R. 34).

Even if we disregard the relationship between the respondent's assignor Automobile Body and look at the respondent alone as foreclosing competition in only the Massachusetts market, the Act is violated because there is a substantial volume of commerce in the "tied" product.[95] The market for replacement top fabrics being illegally restrained for all 1950-54 General Motors automobiles, all 1952-54 Ford Motor automobiles and all 1953 Chrysler Corporation automobiles can hardly be said to be insubstantial (Wright Dep. Ex. 4; Tr. 879, R. 617-18).

Section 271(d) does not excuse respondent and its assignor from violating the antitrust laws. Section 271(d) reads:

> No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having done one or more of the following: (1) derived revenue from acts which if performed by another without his consent would constitute contributory infringement of the patent; (2) licensed or authorized another to perform acts which if performed without his consent would constitute contributory infringement of the patent; (3) sought to enforce his patent rights against infringement or contributory infringement.

Paragraph (d) requires that in the absence of the patentee's consent, the revenue producing, licensed or otherwise

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[95] See United States v. New Wrinkle, Inc., 342 U.S. 371, 376-77 (1952).

authorized acts performed by another constitute contributory infringement or infringement of the patent as defined in paragraphs (a), (b) or (c). Since respondent's patent does not cover top fabrics, but covers only a combination in which the top fabric is a single element, acts exercising monopoly control over the sale of unpatented replacement top fabrics are not excused by paragraph (d) because replacement top fabrics may be sold without the consent of the patentee.

The members of the subcommittee apparently understood that an attempt to obtain a limited monopoly of unpatented articles through the use of a patent would be misuse. We reproduce a colloquy between Congressman Crumpacker and Judge Rich.

> Mr. CRUMPACKER. As you interpret this paragraph (d) as it now reads, would it in any way prevent a court from holding the monopolistic practices referred to as being a misuse of a patent? That is, where a patentee had actually been engaged in trying to gain a limited monopoly of unpatented articles through the use of a patent.
>
> Mr. RICH. If we assume that staples are excluded from paragraph (c)?
>
> Mr. CRUMPACKER. Yes.
>
> Mr. RICH. The answer is that (d) would not prevent their being held, the acts being held to be misuse.

In answer to a question by Congressman Rogers as to whether a patentee could recover if he had only done what is permitted by paragraphs (b) and (c), Judge Rich testified:

> If he has not misused it otherwise. If it comes within the terms of (c). If he tries to license somebody, for

instance, to manufacture a staple article of commerce, to be sold in a patented invention and collect royalties, let us say for the manufacturing of salt tablets to be used in a patented vending machine or dry ice to be used in a patented shipping container, that will be misuse because it doesn't come within the terms of (c).[96]

We believe that the test for determining whether a single patent is misused revolves around the scope of the patent claims. If the subject matter sought to be monopolized is described completely or very closely by all the language in a patent claim, there is no misuse even if the claim is held invalid and/or not infringed. But if the subject matter sought to be monopolized is not described completely or very closely by all the claim language, the patent is misused and the patentee is subject to the consequences of having violated the antitrust laws.

VII.

The Conduct of Respondent Acquiring a Limited Right in the Patent to Bring This Suit and Its Assignor Exercising Monopoly Control Over Unpatented Replacement Fabrics Is Far Below the Standards Required of Patentees Seeking the Aid of Equity to Enforce Patent Rights.

Even if the patentee's conduct is not misuse under the test suggested immediately above, other inequitable conduct on his part may render his patent unenforceable.[97]

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[96] *1951 Hearings* 173-75.

[97] 35 U.S.C. § 282(1) (1952). The Senate wanted to make it perfectly clear that unenforceability, as understood prior to the Patent Act of 1952, was retained as a defense to an infringement suit by adding the words, "or unenforceability" to the defenses originally listed, 98 Cong. Rec. 9323 (1952), and the House approved. *Id.* 9451. Petitioners pleaded this defense. (Defendant's Answer filed May 23, 1956, para. 17, R. 1).

This Court has held that the conduct of a patentee must be beyond reproach when he seeks to invoke the equitable jurisdiction of a federal court in enforcing patent rights.[98] We think that a shell corporation patentee formed solely for the purpose of bringing suit on a limited patent grant should be prohibited from invoking that jurisdiction.

Respondent appears to have been formed solely for the purpose of bringing suit against petitioners by acquiring a limited right in Massachusetts in only the Mackie-Duluk patent while the remaining rights in that patent, along with the full rights in the related Ackermans patent, remained in the affiliated licensing corporation, Automobile Body. It is difficult to conclude otherwise from the facts. Respondent was formed twenty-two (22) days before this suit was brought (R. 264, 634, 1). The business address of respondent (R. 264, 635), the residential address of Vivian L. Pollock, respondent's president and one of its three stockholders (R. 264, 634) and the residential address of its counsel Elliott I. Pollock[99] coincide at 7202 Lynhurst Place, Chevy Chase, Maryland. It received an assignment in only the Mackie-Duluk patent restricted to the Commonwealth of Massachusetts just ten (10) days before this suit was brought (R. 7, 1). Respondent does not manufacture or sell any products and it has received no income from the patent in suit (R. 264, 635). It has received no income from any other source (R. 264, 628, 635-36). Its counsel, Elliott I. Pollock and William D. Hall, counsel for Automobile Body, are in the same law firm (Dep. of William D. Hall, July 8, 1958, p. 105; Tr. 880-84).

Respondent and its assignor, Automobile Body Research Corporation, have followed a rather remarkable course in their common scheme employing two combination patents

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[98] Precision Co. v. Automotive Co., 324 U.S. 806 (1945).

[99] 1959 WASHINGTON METROPOLITAN AREA TELEPHONE DIRECTORY 955.

for monopolizing the sale of unpatented top fabrics used to replace worn fabrics in the combinations covered by the two patents. First, Ackermans sued General Motors and succeeded in having the Court of Appeals for the Fourth Circuit reverse the finding of the District Court that the Ackermans patent was invalid.[100] As a result, General Motors became liable to Ackermans. Shortly after this suit, Ackermans assigned his patent, together with all rights to recover for past infringement, to Automobile Body (Def. Ex. DD; R. 241, 510). As a part of the settlement of this lawsuit, Automobile Body acquired the Mackie-Duluk patent (Pl. Ex. 9a, Tr. 14, R. 473), combined it with the Ackermans patent to claim a 5% royalty on the sale of unpatented replacement fabrics (R. 474), and licensed Ford under both patents for the manufacture and sale of replacement tops (R. 511-12).

It was probably not difficult to persuade Ford and General Motors to take a license under the patents for the sale of replacement top fabrics because car manufacturers themselves have little interest in either manufacturing or replacing the fabric (R. 34). Licensing automobile manufacturers for the sale of replacement fabrics was, however, useful to Automobile Body as a precedent for inducing independent top fabric manufacturers (R. 34) to pay royalties or be subject to a lawsuit for contributorily infringing both patents (R. 473-74) by selling "ready-made replacement fabrics" (R. 473).

It succeeded in licensing one replacement top fabric manufacturer, Atlas International Company. Atlas agreed to "pay a royalty on any replacement top . . . , without regard to whether such top is covered by either of said patents, which by its peculiar shape or other construction

[100] Ackermans v. General Motors Corp., 202 F.2d 642 (4th Cir.) *cert. denied*, 345 U.S. 996 (1953) *reversing* 108 F. Supp. 368 (D. Md. 1952).

adapts it for use on any one or more of the following cars:" (Wright Dep. Ex. 4, Tr. 879, R. 617) and listing all 1950-55 Buicks and Cadillacs, 1950-54 Chevrolets, 1953 Chryslers, De Sotos and Dodges, 1952-54 Fords and Mercurys and 1952-55 Lincolns. Atlas was required to place a notice on each unpatented replacement top it sold saying that it was licensed under one or both of the patents (R. 619-20).

Since the Atlas agreement was terminable (R. 621), any court decision adjudicating both the Mackie-Duluk and Ackermans patents invalid and/or not infringed by selling replacement top fabrics would have served as a strong incentive for Atlas to terminate its license, thereby ending substantial royalty payments from Atlas to Automobile Body. The unfavorable adjudication of only a single patent would be less serious because Atlas would still face the possibility of a suit for contributory infringement of the remaining patent. It was also important to Automobile Body to prevent the Ackermans patent from being adjudicated outside the Fourth Circuit because only a holding by the Court of Appeals for the Fourth Circuit or the United States Supreme Court that an Ackermans patent claim was invalid would terminate Ford's obligation to pay royalties under that patent (Def. Ex. DD; R. 241, 511-12). The claims had already been held valid in the Fourth Circuit and certiorari denied by this Court. The only chance that this Court would review the validity of these claims would be if a court of appeals in another circuit held the claims invalid.[101]

If Automobile Body sued petitioners here in Massachusetts on the Mackie-Duluk patent, petitioners could have asked for a declaration of noninfringement and invalidity of both patents. It is not surprising that after accusing

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[101] *Ibid.* and see Sanitary Refrigerator Co. v. Winters, 280 U.S. 30, 34 (1929).

petitioner Aro of contributorily infringing both patents (R. 473) and receiving a letter from petitioners' counsel refusing to take a license and pay royalties on the sale of each unpatented replacement top fabric (Pl. Ex. 9d; Tr. 14, R. 475). Automobile Body never brought suit. Instead of Automobile Body itself bringing suit against petitioners, the respondent shell corporation was formed nearly two years after the latter letter refusing to take a license. Automobile Body then assigned only a territorial grant in the Commonwealth of Massachusetts to the newly-formed shell corporation which then brought this suit. Evidently one purpose of assigning such a restricted right to respondent was to permit it to sue in Massachusetts without risking Automobile Body's rights in the rest of the United States.

Automobile Body also enjoyed a procedural advantage by using respondent to sue. Had Automobile Body sued directly, it would have been subject to the full discovery procedures of a party as prescribed by the Federal Rules of Civil Procedure.[12] Since Automobile Body was not a party, petitioners had to pursue unwilling individuals associated with Automobile Body who asserted the separation between respondent and Automobile Body when refusing petitioners relevant information. For example, we asked William D. Hall, the counsel for Automobile Body for "All letters to . . . manufacturers, jobbers, and/or dealers en-

[12] FED. R. CIV. P. 26(d)(2) provides: "The deposition of a party or of any one who at the time of taking the deposition was an officer, director, or managing agent of a public or private corporation, partnership, or association which is a party may be used by an adverse party for any purpose."

FED. R. CIV. P. 33 provides for written interrogatories to parties and FED. R. CIV. P. 34 provides for "the court in which an action is pending" to order any party to produce documents for inspection.

Automobile Body avoided the duties which the rules impose upon a party by letting respondent bring suit.

gaging in the manufacture and/or sale of automobile top replacements"[103] and that request was objected to because

> Convertible Top Replacement Co. owns the territorial rights for the Commonwealth of Massachusetts under the Mackie-Duluk patent No. 2,569,724, and it is infringement arising under that territorial right that is in suit in Boston.
>
> The moving party's client [Automobile Body] owns other territorial rights under that patent. Letters of infringement written by the moving party concerning his client's rights to his territory of the United States obviously can have no bearing on the suit in Boston, since the two territorial rights are owned by two separate corporations.[104]

Our interrogatory 16 directed to respondent,

> Has Automobile Body Research Corporation derived an income from the patent in suit from sales, manufacture or use of products manufactured and/or sold within the Commonwealth of Massachusetts?,[105]

was answered

> Plaintiff is not informed as to the correct answer to this question and therefore cannot answer the same.[106]

We believe that the effects of the "teamwork" between the respondent suing corporation and the licensing corporation, Automobile Body, represents another example of the evils which can be perpetrated by two entities acting in concert to achieve a result which neither could attain

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[103] Convertible Top Replacement Co. v. Aro Mfg. Co., Misc. No. 18-58, D. D.C., affidavit of William D. Hall, June 23, 1958, p. 5.

[104] *Id.* 6.

[105] Defendants' Interrogatories served September 14, 1956.

[106] Plaintiff's Answer to Interrogatory No. 16 served on defendants October 30, 1956.

alone.[107] It is for this reason that the criminal law has sought to establish strong prohibitions on conspiracies, even though the acts of a single conspirator alone would be insufficient to constitute a crime.[108]

The antitrust laws also recognize the increased ability of a number of conspirators to lessen competition.[109] Corporations are subject to the provisions of the antitrust laws.[110] And this Court has held that common control of corporations does not afford an excuse for the commonly controlled corporations to conspire in restraint of trade.[111] These decisions are sound. If a controlling entity decides to form one or more legally separate entities to obtain tax, accounting or other business advantages, it is only fair to require the controlling entity to also assume responsibility for maintaining dealings with and among the controlled entities to the same standards established by law which unrelated entities must meet in their dealings. We therefore believe that Automobile Body and respondent have conspired to restrain competition in unpatented replacement top fabrics and thereby violate sections 1-3 of the Sherman Act.[112] This conspiracy contemplated Automobile Body continuing to receive royalties under both patents for the sale of unpatented top fabrics covered by neither patent, while respondent sought to enjoin petitioner Aro,

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[107] United States v. Rabinowich, 238 U.S. 78, 88 (1915); Woods v. United States, 240 F.2d 37, 41 (1956), *cert. denied*, 353 U.S. 941 (1957).

[108] Duplex Co. v. Deering, 254 U.S. 443, 465 (1921); Pettibone v. United States, 148 U.S. 197, 203 (1893).

[109] Sherman Act §§ 1-3, 69 Stat. 282 (1955), 15 U.S.C. §§ 1-3 (1958), *infra*, 78-79.

[110] Sherman Act § 8, 26 Stat. 210 (1890), 15 U.S.C. § 7 (1958); Clayton Act § 1, 38 Stat. 730 (1914), 15 U.S.C. § 12 (1958).

[111] Kiefer-Stewart Co. v. Joseph E. Seagram & Sons, Inc., 340 U.S. 211, 215 (1951); United States v. Yellow Cab Co., 332 U.S. 218, 227 (1947). See also Timken Roller Bearing Co. v. United States, 341 U.S. 593, 597-98 (1951).

[112] Note 109 *supra*.

probably the biggest competitor of Automobile Body's licensees, from selling the unpatented top fabrics. We also believe that Automobile Body violates section 3 of the Clayton Act[113] because it conditions a license to use combinations covered by both patents on the user purchasing replacements for worn unpatented fabrics from sources designated by and paying royalties to Automobile Body.

It is the duty of a court of equity to withhold aid from a patentee with unclean hands who is pressing an infringement action. *Precision Co.* v. *Automotive Co.*, 324 U.S. 806 (1945). The defense of misuse of patents is of such importance that it may be asserted at any time. *Frank Adams Electric Co.* v. *Westinghouse Electric Mfg. Co.*, 146 F.2d 165, 167 (8th Cir. 1945), even in a second lawsuit involving the same patentee plaintiff and the same defendant, *Mercoid Corp.* v. *Mid-Continent Inv. Co.*, 320 U.S. 661 (1944). We believe that the conduct of respondent and/or the licensing corporation, Automobile Body, is far below the high standard of conduct which patentees must meet in order to seek the aid of equity in enforcing patent rights. And the inequitable conduct of Automobile Body is not purged by transferring rights to respondent, *Sample* v. *Barnes*, 55 U.S. (14 How.) 69, 73 (1852), for equity looks with great disfavor upon one who tries to litigate his individual patents asserted against the same defendant in separate suits. *Helene Curtis Industries* v. *Sales Affiliates*, 247 F.2d 940, 945 (2d Cir. 1957). As this Court said in *Precision Co.* v. *Automotive Co.*, 324 U.S. 806, 816 (1945):

> . . . A patent by its very nature is affected with a public interest. As recognized by the Constitution, it is a special privilege designed to serve the public purpose of promoting the "Progress of Science and use-

[113] 38 Stat. 731 (1914), 15 U.S.C. § 14 (1958), *infra*, 80.

ful Arts". At the same time, a patent is an exception to the general rule against monopolies and to the right to access to a free and open market. The far-reaching social and economic consequences of a patent, therefore, give the public a paramount interest in seeing that patent monopolies spring from backgrounds free from fraud or other inequitable conduct and that such monopolies are kept within their legitimate scope.

VIII.

THE TOP FABRIC DOES NOT MEET THE CONSTITUTIONAL STANDARDS OF INVENTION. IF THE STATUTE IS CONSTRUED TO AUTHORIZE THE GRANT OF LIMITED MONOPOLY RIGHTS OVER THE TOP FABRIC, THE STATUTE IS UNCONSTITUTIONAL.

For purposes of the argument made above, we have assumed the top fabric itself was an invention at the time the Mackie-Duluk patent application was filed and could have been separately claimed as such. In fact, the top fabric standing alone does not meet either the statutory or constitutional standards of invention.

Respondent argued in the Court of Appeals that a top fabric with a rear flap was an invention.[114] In this Court it suggests that the fabric is a patented invention.[115] But in the District Court where the validity of the combination was in issue, respondent emphasized the importance of the cooperation among the different elements in arguing that the combination was an invention.[116]

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[114] Brief for Appellee, p. 8 fn.

[115] Opposition Brief for Respondent p. 11.

[116] In arguing the validity of the patented *combination* over the prior art Ackermans patent (Def. Ex. GG; R. 267, 569-78), Mr. Pollock said, ". . . there is the important distinction that in Mackie-Duluk the fabric extends down to the trough and is permanently attached to it . . ." "I will further note that in the Mackie-Duluk structure there is

Figs. 9 and 10 of the prior art (R. 29) Ackermans patent (Def. Ex. GG; R. 267, 571) show a top fabric **126** having a rear flap **130** which functions to carry seals **128** which "contact the inner edge of the body at and below the belt line **121** to minimize the seepage of water through the juncture between the top and the body of the vehicle." (R. 575, Col. 6, ll. 25-29) and direct water seeping through the juncture between the top and the body to the rain trough 124 (*Id.*, ll. 20-22).

Fig. 3 (R. 581) and Fig. 10 (R. 583) of the Best patent (Def. Ex. GG; R. 267) show a top fabric **18** having downwardly extending side panels **20** (R. 585, Right Col., ll. 49-50) which are snap fastened by the moveable parts **59** and the pins **58** to secure the top fabric to the inside of the body at these points (R. 568, Right Col., ll. 33-36). From a comparison of these top fabrics with the top fabrics sold by the petitioners (R. 507, 519, 531) it is evident that the top fabric fragmentarily illustrated but not claimed in the Mackie-Duluk patent is itself not an invention. In substance, the top fabrics sold by petitioners are like those in the prior art. The only difference might be one of dimensions or slight variation in shape, but it is well settled that a mere change of form is not patentable.[117]

While the Court of Appeals said form in itself is patentable, citing *Wilson* v. *Simpson*, 50 U.S. (9 How.), 109 (1850), we note that this case was decided before the Court

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what we call a wiper arm. This wiper arm exerts pressure on the fabric or at least restricts the inward movement of the fabric. This becomes very important under actual operating conditions since this of itself prevents the top material at the rear quarter from being inside or from flapping about, due to wind forces or other forces which might be applied." (R. 301).

[117] Howard v. Detroit Stove Works, 150 U.S. 164, 170 (1893); Pope Mfg. Co. v. Gormully & Jeffery Mfg. Co., 144 U.S. 238, 247-48 (1892); Butler v. Steckel, 137 U.S. 21 (1890); Burt v. Evory, 133 U.S. 349, 358 (1890); Hill v. Wooster, 132 U.S. 693, 700-01 (1890).

decided *Hotchkiss* v. *Greenwood*, 52 U.S. (11 How.) 248 (1850) establishing the first requirement of "invention". The Court there defined invention as a change not within the "ingenuity or skill . . . of an ordinary mechanic acquainted with the business".[118] Any change not within the ingenuity or skill of an ordinary mechanic acquainted with convertible automobiles taught by Mackie and Duluk resides in "fastening the folding material considerably below the top of the tonneau and then using a wiper arm automatically operated by the bow structure for wiping the inside of the folding material as the top is raised and pressing it against the top of the tonneau" (Pl. Ex. 2, R. 104, 445) as stated by the General Motors attorneys to the Patent Office Examiner during the prosecution of this application. That is, the invention of a CONVERTIBLE FOLDING TOP WITH AUTOMATIC SEAL AT REAR QUARTER (R. 589) is in a combination of elements, not the top fabric itself.

Since the top fabric itself does not meet the constitutional standards of invention, the decision of the court below construing the provisions of contributory infringement as granting the patentee a limited monopoly to top fabrics used in the invention is an interpretation which is inconsistent with the Constitution. Only the discoveries of inventors may be protected, and then only to the end of promoting the useful arts. As Mr. Justice Douglas said:

> It is worth emphasis that every patent case involving validity presents a question which requires reference to a standard written into the Constitution. Article I, § 8, contains a grant to the Congress of the power to permit patents to be issued. But, unlike most of the specific powers which Congress is given, that grant is qualified. . . . The Congress acts under the

[118] 52 U.S. (11 How.) at 267.

> restraint imposed by the statement of purpose in Art. I, § 8. The purpose is "To promote the Progress of Science and useful Arts. . . ." The means for achievement of that end is the grant for a limited time to inventors of the exclusive right to their inventions.
>
> . . .
>
> The standard of patentability is a constitutional standard . . .[119]

In *Mercoid* Mr. Justice Jackson said:

> I see no constitutional or statutory authority for giving . . . [a combination patent] additional value by bringing into its monopoly all or any of the unpatentable parts.[120]

We agree with the statement that the grant for a limited time to inventors is of the exclusive right to their inventions, not to a part which is used in their invention. Since the top fabric does not meet the constitutional standard of invention, Congress has no authority to give respondent the exclusive right to top fabrics used as a part of the combination covered by its patent. The protection afforded by Congress is limited to new and useful inventions.[121] As we stated above, we believe that Congress enacted the

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[119] A. & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 1 (1950) (concurring opinion). See also Hill v. Wooster, 132 U.S. 693, 701 (1890) and Thompson v. Boisselier, 114 U.S. 1, 11 (1885).

[120] 320 U.S. at 680 (dissenting opinion). The dissenters said that Mercoid should have raised the defense of misuse in an earlier suit in which it assumed the defense of a householder held to have directly infringed by using the whole patented combination. But the entire Court agreed that since the purchase and use of the unpatented thermostat by the householder was not an infringement, the seller of the thermostat could not be amerced as a contributory infringer. *Id.* 674, 676, 680.

[121] Note 119 *supra.*

provisions on contributory infringement to allow the patentee to prevent the sale of what is technically not patented but is in substance his patented invention. Our proposed interpretation is both constitutional and consistent with all the purposes of the provisions,[122] whereas the interpretation of the court below not only seems unconstitutional, but is also inconsistent with the purposes of these provisions.[123]

In *Supermarket* Mr. Justice Jackson said:

> Courts should scrutinize combination patent claims with a care proportioned to the difficulty and improbability of finding invention in an assembly of old elements.[124]

If courts should be reluctant to confer monopoly rights upon an assembly of old elements, we see no logical reason for attaching the privileges of a patent to one of the old elements which was never even claimed as an invention in the patent on the assembly, merely because the dimensions of the old element are selected to fit in the assembly. That the specially made part fits in a combination which may meet the constitutional and statutory standards of invention does not justify relaxing these standards when evaluating the merit of the part standing alone. The top fabrics sold by petitioners do not meet either of these standards. Hence, there is neither statutory nor constitutional authority for preventing petitioners from selling top fabrics to anyone.

The consequences of a standard of invention loose enough to regard the top fabric alone as an invention were well

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[122] *Infra*, 30-48.

[123] *Infra*.

[124] 340 U.S. at 152.

stated by Mr. Justice Bradley nearly eighty years ago in *Atlantic Works* v. *Brady*, 107 U.S. 192, 200 (1882):

> It was never the object of those laws to grant a monopoly for every trifling device, every shadow of a shade of an idea, which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufactures. Such an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate inventions. It creates a class of speculative schemers who make it their business to watch the advancing wave of improvements, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country, without contributing anything to the real advancement of the arts. It embarrasses the honest pursuit of business with fears and apprehensions of concealed liens and unknown liabilities to lawsuits and vexatious accountings for profits made in good faith.

The words of Mr. Justice Bradley aptly describe the series of events initiated by Automobile Body in its plan to exact royalties from the sale of unpatented replacement top fabrics. This Court is respectfully urged to discourage others from following the same course in the future by subjecting respondent to liability for its violation of the antitrust laws.

Conclusion

In view of the above discussion and authorities, it is respectfully requested that this Court reverse the decision of the court below with instructions to declare that the patent in suit has been misused, that petitioners do not infringe nor contributorily infringe said patent by making or selling unpatented top fabrics, or by installing unpatented top fabrics which replace worn ones, that respondent has violated the antitrust laws, and that petitioners be awarded three times the damages proved for such violations, costs and reasonable counsel fees.

Respectfully submitted,

DAVID WOLF,
Counsel for Petitioners
68 Devonshire St.
Boston 9, Mass.

Of Counsel,
CHARLES HIERER
GEORGE L. GREENFIELD

Appendix A

§ 271. Infringement of patent

(a) Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent.

(b) Whoever actively induces infringement of a patent shall be liable as in infringer.

(c) Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

(d) No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having done one or more of the following: (1) derived revenue from acts which if performed by another without his consent would constitute contributory infringement of the patent; (2) licensed or authorized another to perform acts which if performed without his consent would constitute contributory infringement of the patent; (3) sought to enforce his patent rights against infringement or contributory infringement. 35 U.S.C. § 271.

§ 103. Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section

102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made. 35 U.S.C. § 103.

§ 112. Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most clearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. 35 U.S.C. § 112.

§ 282. Presumption of validity; defenses

A patent shall be presumed valid. The burden of establishing invalidity of a patent shall rest on a party asserting it.

The following shall be defenses in any action involving the validity or infringement of a patent and shall be pleaded:

(1) Noninfringement, absence of liability for infringement, or unenforceability,

(2) Invalidity of the patent or any claim in suit on any ground specified in part II of this title as a condition for patentability,

(3) Invalidity of the patent or any claim in suit for failure to comply with any requirement of sections 112 or 251 of this title,

(4) Any other fact or act made a defense by this title.

ANTITRUST LAWS

Sherman Act

Section 1. Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal: *Provided*, That nothing herein confained shall render illegal, contracts or agreements prescribing minimum prices for the resale of a commodity which bears, or the label or container of which bears, the trade mark, brand, or name of the producer or distributor of such commodity and which is in free and open competition with commodities of the same general class produced or distributed by others, when contracts or agreements of that description are lawful as applied to intrastate transactions, under any statute, law or public policy now or hereafter in effect in any State, Territory, or the District of Columbia in which such resale is to be made, or to which the commodity is to be transported for such resale, and the making of such contracts or agreements shall not be an unfair method of competition under section 5, as amended and supplemented, of the

act entitled "An Act to create a Federal Trade Commission, to define its powers and duties, and for other purposes", approved September 26, 1914: *Provided further*, That the preceding proviso shall not make lawful any contract or agreement, providing for the establishment or maintenance of minimum resale prices on any commodity herein involved, between manufacturers, or between producers, or between wholesalers, or between brokers, or between factors, or between retailers, or between persons, firms, or corporations in competition with each other. Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding fifty thousand dollars, or by imprisonment not exceeding one year, or by both said punishments in the discretion of the court. 69 Stat. 282, 15 U.S.C. § 1.

Sec. 2. Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding fifty thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court. 69 Stat. 282, 15 U.S.C. § 2.

Sec. 3. Every contract, combination in form of trust or otherwise, or conspiracy, in restraint of trade or commerce in any Territory of the United States or of the District of Columbia, or in restraint of trade or commerce between any such Territory and another, or between any such Territory or Territories and any State or States or the District of Columbia, or with foreign nations, or between the District of Columbia and any State or States or foreign nations, is hereby declared illegal. Every person who shall

make any such contract or engage in any such combination or conspiracy, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding fifty thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court. 69 Stat. 282, 15 U.S.C. § 3.'

Sec. 8. That the word "person", or "persons", wherever used in this act shall be deemed to include corporations and associations existing under or authorized by the laws of either the United States, the laws of any of the Territories, the laws of any State, or the laws of any foreign country. 26 Stat. 210, 15 U.S.C. § 7.

Clayton Act

Sec. 3. That it shall be unlawful for any person engaged in commerce, in the course of such commerce, to lease or make a sale or contract for sale of goods, wares, merchandise, machinery, supplies or other commodities, whether patented or unpatented, for use, consumption, or resale within the United States or any Territory thereof or the District of Columbia or any insular possession or other place under the jurisdiction of the United States, or fix a price charged therefor, or discount from, or rebate upon, such price, on the condition, agreement, or understanding that the lessee or purchaser thereof shall not use or deal in the goods, wares, merchandise, machinery, supplies, or other commodity of a competitor or competitors of the lessor or seller, where the effect of such lease, sale, or contract for sale or such condition, agreement, or understanding may be to substantially lessen competition or tend to create a monopoly in any line of commerce. 38 Stat. 731, 15 U.S.C. § 14.

Sec 4. That any person who shall be injured in his business or property by reason of anything forbidden in the

antitrust laws may sue therefor in any district court of the United States in the district in which the defendant resides or is found or has an agent, without respect to the amount in controversy, and shall recover threefold the damages by him sustained, and the cost of suit, including a reasonable attorney's fee. 38 Stat. 731, 15 U.S.C. § 15.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1960

No. 21

ARO MANUFACTURING CO., INC., *et al.*,

Petitioners,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.,

Respondents.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

MOTION BY THE AMERICAN PATENT LAW ASSOCIATION FOR LEAVE TO FILE A BRIEF *AMICUS CURIAE* AND BRIEF AS *AMICUS CURIAE*

THE AMERICAN PATENT LAW ASSOCIATION

WILLIAM H. WEBB
Its Attorney

1220 Farmers Bank Building
Pittsburgh 22, Pa.

Of Counsel:
JOYCE S. KANE
HAINES & JOHNSON
JOHN M. WEBB

September 20, 1960

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MOTION BY THE AMERICAN PATENT LAW ASSOCIATION FOR LEAVE TO FILE A BRIEF *AMICUS CURIAE*

The American Patent Law Association respectfully moves this Honorable Court for leave to file the accompanying brief as *amicus curiae*.

The American Patent Law Association is a national membership association of approximately 2,200 lawyers, most of whom specialize in the practice of the law relating to patents. Leave is requested to file a brief as *amicus curiae* in this case because the interpretation of the contributory infringement provisions of Section 271 of the Patent Act of 1952 *may* be involved and, because of the great public interest in and importance of those provisions, the construction of which has not previously been before this Court.

Respectfully submitted,

THE AMERICAN PATENT LAW ASSOCIATION

WILLIAM H. WEBB
Its Attorney

Of counsel:

DAVID S. KANE
HAYNES N. JOHNSON
JOHN M. WEBB

September 19, 1960

IN THE

Supreme Court of the United States

OCTOBER TERM 1960

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Petitioners

v.

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Respondents

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

BRIEF FOR THE AMERICAN PATENT LAW ASSOCIATION AS *AMICUS CURIAE*

I

This action involves two main issues stated as Questions Nos. 1 and 2 in the brief for petitioners. However, they are stated in reverse by petitioners. The first issue, i.e. Question No. 2, relates to direct infringement and involves the distinction between reconstruction, on the one hand, and permissible repair, on the other; whereas, the second issue (Question No. 1) relates to contributory infringement. If this Court should hold that there was no direct infringement as a result of the acts involved in the re-

placement of the top, the question of contributory infringement will not even be reached and the contributory infringement provisions of Section 271 of 35 U.S.C. need not be construed.

If, on the other hand, this Court should hold that the replacement of the top constituted reconstruction as distinguished from permissible repair and, hence, that there was direct infringement, then and only then is the construction of the contributory infringement provisions of Section 271 of concern to the Court in this case.

The District Court expressly held (119 U.S.P.Q. 122, 124-25) that "replacing the fabric is not permissive repair." The Court of Appeals (270 F. 2d 200, 205) likewise held that "the defendants were not making permissible repairs to, but were substantially reconstructing, the convertible top combination covered by the Mackie-Duluk patent." It is to these holdings that the brief of the Government is directed. It is not directed to the holdings below based on the contributory infringement provisions of Section 271. If the Court should overrule the above-stated holdings and hold that what the defendants did was merely permissible repair, the question of contributory infringement does not arise and the Court need not even consider those provisions of Section 271 relating to contributory infringement.

The interests of this Association reside primarily in the contributory infringement issue. The determination of that issue, if reached by the Court, can be disposed of readily on the basis of the express provisions of Paragraphs (b) and/or (c) of Section 271, which are nothing more than statutory declarations of the law applicable to joint tortfeasors. This, of course, is the basis upon which the doctrine of contributory infringement always has rested. These paragraphs of Section 271 define the metes and bounds of the doctrine of joint tortfeasors as applied to patent infringements; and, when the patent owner

asserts his rights thereunder, he is merely proceeding to protect his interest in the patented combination and is not, as argued by the petitioners, seeking to expand the metes and bounds of the invention. Congress, by enacting Paragraphs (b) and (c) of Section 271, has given legislative authorization to the patent owner to proceed under certain circumstances against certain acts so that he can adequately protect the thing or combination on which patent rights were granted to him.

On this issue of contributory infringement, the admissions contained in petitioners' brief, including the admissions contained in petitioners' statement of Question No. 1, necessitate a holding of contributory infringement since the replaced top was a "material" or "essential" element or part of the patented combination and was especially made and intended and adapted for use in an infringement of the patent. Any other conclusion (assuming a holding that defendant's acts constituted reconstruction) would effectively destroy and nullify Paragraphs (b) and (c) of Section 271 and would be directly contrary to the Congressional intent in enacting these provisions.

While this Association is primarily interested in the contributory infringement issue, we shall discuss briefly the matter of repair versus reconstruction and then the intent, purpose and proper construction of Section 271.

II

On the issue of reconstruction versus permissible repair, petitioners and the Government, in effect, are asking this Court to overrule its decision in *Leeds & Catlin Company* v. *Victor Talking Machine Company*, 213 U. S. 325 (1909), and to depart from the principles discussed in *The Morgan Envelope Company* v. *Albany Perforated Wrapping Paper Co.*, 152 U. S. 425 (1893), and *Wilson* v. *Simpson*, 9 How. 109 (1850), and numerous cases decided in the Courts below.

The patent in suit in the *Leeds & Catlin* case covered the combination of a phonograph stylus and a record disc; and this Court there characterized the importance of the record itself as part of the combination, stating:

> "It will be observed how important the record is to the invention embodied in the claims . . . It is the disc that serves to distinguish the invention—to mark the advance upon the prior art . . ." (p. 330)

In that decision, this Court specifically distinguished various prior decisions dealing with repair (as against reconstruction) of an unpatented component. It stated:

> ". . . It would seem that, on principle, when deterioration of an element has reached the point of unfitness, there is a destruction of the combination, and a renewal of the element is a reconstruction of the combination. And it would also seem on principle that there could be no license implied from the difference in the durability of the elements of periodicity in their use . . ." (p. 333)

* * * * * *

> ". . . The combination in the case at bar is valid, as we have unhesitatingly declared. The function and the performance is the result of the joint action of the disc and the stylus. *The disc* is not a mere concomitant to the stylus; it co-acts with the stylus to produce the result. Indeed, as we have seen, it *is the distinction of the invention*, constituted by its laterally undulating line of even depth and the effect thereof, the advance upon the prior art. To confound its active cooperation with the mere passivity of the paper in the mechanism described in Morgan Envelope Company is not only to confound essential distinctions made by the patent laws, but essential distinctions between entirely different things . . ." (p. 335) (Emphasis supplied.)

Whether in a given case there is an implied license to substitute new for worn or broken parts is a question of fact. "Every case, as we have said, must be decided on its special facts and circumstances." *Automotive Parts Co.* v. *Wisconsin Axle Co.*, 81 F. 2d 125, 127 (6th Cir. 1935); *George Close Co.* v. *Ideal Wrapping Machine Co.*, 29 F. 2d 533 (1st Cir. 1928); *Davis Electrical Works* v. *Edison Electric Light Co.*, 60 F. 276 (1st Cir. 1894); *Belknap* v. *Wallace Addressing Machine Co., Inc.*, 12 F. 2d 597 (2nd Cir. 1926); *Morrin* v. *Robert White Engineering Co.*, 143 F. 519 (2nd Cir. 1905); *Edison Electric Light* v. *Peninsular Light Power and Heat Co.*, 101 F. 831, 836 (6th Cir. 1900); *Williams* v. *Hughes Tool Co.*, 186 F. 2d 278 (10th Cir. 1950). In deciding in favor of "repair" this Court stated this same rule in *Heyer* v. *Duplicator Co.*, 263 U. S. 100 (1923).

This Association believes that it is unwise to lay down a more precise rule on this subject in view of the wide variety of situations under which the question can conceivably arise.

Since both the Court of Appeals and the District Court have held that the fabric top in question was a material part of the invention and that replacing that fabric would be a major reconstruction of the top assembly, it follows that, in order to reverse the lower court decision, this Court must overrule its prior position on the reconstruction doctrine.

III

If this Court should reach the contributory infringement issue, it will then be necessary to consider the proper scope and meaning of Section 271 of the 1952 Patent Act and the Congressional intent behind it.

The doctrine of contributory infringement has been a part of our law for many years. It is in nowise peculiar

to patent law. It constitutes nothing more than a specific application of the doctrines applicable to joint tortfeasors. Those doctrines recognize that for harm resulting to a third person from the tortious conduct of another, a person is liable if he participates in such conduct or induces such conduct knowing of the conditions under which the act is done or intending the consequences which ensue, or knows that the other's conduct constitutes a breach of duty and gives essential assistance or encouragement to the other so to conduct himself: *Restatement of the Law of Torts*, Section 876. In the case of joint tortfeasors, a person may be liable though he himself has not actually trespassed upon the property rights secured by the law to the aggrieved person. Nevertheless, the law gives a right of action to the aggrieved person in order to enable him to protect those property rights.

In the case of contributory infringement, the patentee is not seeking to enlarge the property rights granted to him, but is merely seeking to protect those rights against all whose acts result in objectionable trespass upon those rights.

Due to the fact that the metes and bounds of the doctrine of contributory infringement and the exact nature of the patentee's remedies had not been defined by Congress prior to the passage of the 1952 Patent Act but had been enounced only on a case by case basis by judicial authorities, some confusion arose because of an apparent conflict between this long standing doctrine of contributory infringement and the misuse doctrine developing in the law. Had the metes and bounds of confributory infringement been definite, there would have been no occasion for any conflict between the two doctrines for the obvious reason that any act on the part of the patentee in asserting his right to protect the thing granted to him under the patent laws could not have constituted a misuse of the grant. This apparent conflict was the subject of innumerable articles and the result was that many commentators

seriously questioned whether the doctrine of contributory infringement still existed.[1]

In enacting Section 271, Congress was fully aware of the situation just stated and deliberately sought to rectify it by specifying, at least in part, those acts constituting contributory infringement and by specifying further that the patent owner should not be penalized under the so-called misuse doctrine if he pursued his right to protect the property secured to him by the patent by doing certain specified acts.

Turning to the House Report, we find a specific intent to reaffirm the contributory infringement doctrine:

> ". . . *The doctrine of contributory infringement has been part of our law for about 80 years.* It has been applied to enjoin those who sought to cause infringement by supplying someone else with the means and directions for infringing a patent. . . . Considerable doubt and confusion as to the scope of contributory infringement has resulted from a number of decisions in courts in recent years. *The purpose of this section is to codify in statutory form principles of contributory infringement and at the same time eliminate this doubt and confusion.* . . ." (H. R. Rep. No. 1923, 82d Cong., 2d Sess. (1952), p. 9.) (Emphasis supplied.)

A similar statement is found in Sen. Rep. No. 1979, 82d Cong., 2d Sess. (1952), p. 8.

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[1] Knoth, Contributory Infringement: R.I.P., 31 J. Pat. Off. Soc. 767 (1949); Mathews, Contributory Infringement and the *Mercoid* case, 27 J. Pat. Off. Soc. 260 (1945); Palmer, Contributory Infringement since the *Mercoid* case, 29 J. Pat. Off. Soc. 699 (1947); Rich, Contributory Infringement, 31 J. Pat. Off. Soc. 449 (1949); Waite, Has the Doctrine of Contributory Infringement been Repudiated? 42 Mich. L. Rev. 914 (1944); Wood, the Tangle of *Mercoid* case Implications, 13 Geo. Wash. L. Rev. 61 (1944).

The *Hearings before the House Committee of the Judiciary on H. R. 3760 (Patent Law Codification and Revision)* 82nd Cong., 1st Sess. (1951), show that Congress had the *Mercoid*[1] and other "misuse" decisions very much before it when it passed Section 271 of the Act. (See, for example, the *Hearings* at pages 96, 105, 138-149, 151-176.)

This Congressional adoption of contributory infringement is also confirmed in the Attorney General's Report:

> "*The Congressional response to the Mercoid decisions is found in Section 271 of the 1952 Patent Code* . . . At the least they are reasonable expressions of Congressional intention (a) to codify specifically the remedy of contributory infringement and affirmatively to declare that within the ambit of the comparatively narrow doctrine so defined the action is itself not a misuse; and (b) to cut down the breadth of the all-inclusive applications of the patent misuse doctrine stemming from the implications of the Mercoid and other cases. . . ." (Report of the Attorney General's National Committee to study the Antitrust Laws (1955), pp. 252-3) (Emphasis supplied.)

In its express statement of acts constituting contributory infringement, Congress, by language which really does not admit of any argument, covered the type of act which is involved here, assuming, of course, that there was a direct infringement resulting from the reconstruction of the top by the application of the purchased cover. In Section 271(c), Congress specifically provided that a person will be liable as a contributory infringer if:—

> (a) the thing sold is a component of a patented machine, manufacture, combination or composition, and

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[1] *Mercoid Corp. v. Mid-Continent Investment Co.*, 320 U. S. 661 (1944).

(b) it constitutes a material part of the invention, and

(c) it was especially made or especially adapted for use in an infringement and the vendor knew this, and

(d) it was not a staple article, and

(e) it was not a commodity of commerce suitable for substantial non-infringing use.

The tops in question and the acts of the vendor in the case at bar comply in every respect with these requirements. A clearer case of compliance is difficult to envision. Hence, any decision here holding the acts in question do not constitute contributory infringement (assuming a direct infringement by reconstruction) would serve to emasculate Section 271(c) and destroy the plain Congressional intent underlying it.

Petitioners' arguments (which are wholly unsupported by the Government's brief) are not supported by either logic or the legislative history underlying Section 271. They fly in the face of the plain language of Section 271 and to adopt them would result in a complete rewriting of that section.

IV

This Association asks this Court to give meaning to Section 271 just as have the various lower Courts since the date of its passage.

In *Stearns* v. *Tricker & Rasor*, 252 F. 2d 589 (9th Cir. 1957), the Court held:

> "*Principally because of the Mercoid case, Section 271 of the 1952 Patent Act was adopted* . . ." (p. 601) (Emphasis supplied.)

• • •

"Section 271 (d) (3) authorizes a patentee to enforce his patent rights against contributory infringers and is a clear expression of public policy approving such action. Language in Mercoid as to such action being 'contrary to public policy' is therefore inapplicable under present law . . ." (p. 502)

Comparably, in *Sola Electric Company* v. *General Electric Company*, 146 F. Supp. 625 (N. D. Ill. 1956) the Court concluded that it was Congress' intent to overrule *Mercoid*:

"The Court . . . cannot escape the conviction that it was the purpose of Congress to change the law as announced in the two Mercoid cases . . . and that it did change the law as announced in those cases. . . ." (p. 647).

• • •

". . . the court holds, accordingly, that the said Act of 1952 *makes proper and lawful that which under the doctrine of the Mercoid cases, above cited, would have been a misuse of the patent.*" (p. 648) (Emphasis supplied.)

See also *Freedman* v. *Friedman*, 242 F. 2d 364 (4th Cir. 1957); *Southern States Equipment Corp.* v. *USCO Power Equipment Corp.*, 209 F. 2d 111 (5th Cir. 1953); *Sasser* v. *Senco Products*, 242 F. 2d 565 (6th Cir. 1957); Oppenhein, Patents and Antitrust: Peaceful coexistence, 54 Mich. L. Rev. 199 (1955); Rich, Infringement Under Section 271 of the Patent Act of 1952, 21 Geo. Wash. L. Rev. 36 (1953).

Conclusion

The doctrine of contributory infringement has been characterized as "an expression of both law and morals." (Sen. Rep. No. 1979, 82d Cong., 2d Sess. (1952), p. 8.)

This Court should give meaning and substance to Section 271 of the Patent Act and so give effect to clearly expressed Congressional purpose.

Respectfully submitted,

THE AMERICAN PATENT LAW ASSOCIATION
WILLIAM H. WEBB
Its Attorney

Of counsel:

DAVID S. KANE
HAYNES N. JOHNSON
JOHN M. WEBB

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PETITIONERS' REASONS FOR WITHHOLDING CONSENT TO THE FILING OF A BRIEF AMICUS CURIAE BY THE AMERICAN PATENT LAW ASSOCIATION

DAVID WOLF,
Counsel for Petitioners
68 Devonshire St.
Boston 9, Mass.

CHARLES HIERES
L. GREENFIELD

Law Printing Company, Boston, Mass. — Law Printers

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PETITIONERS' REASONS FOR WITHHOLDING CONSENT TO THE FILING OF A BRIEF AMICUS CURIAE BY THE AMERICAN PATENT LAW ASSOCIATION

Petitioners have refused the request of William H. Webb, Esq. to file a brief amicus curiae, purportedly on behalf of members of the American Patent Law Association, because the requirements of Rule 42(3) for filing such a brief have not been met. Rule 42(3) of this Court reads as follows:

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> When consent to the filing of a brief of an *amicus curiae* is refused by a party to the case, a motion for leave to file may timely be presented to the court. It shall concisely state the nature of the applicant's interest, set forth facts or questions of law that have not been, or reasons for believing that they will not adequately be, presented by the parties, and their relevancy to the disposition of the case; and it shall in no event exceed five printed pages in length. A party served with such motion may seasonably file an objection concisely stating the reasons for withholding consent.

Neither the letter sent to us requesting consent, nor the motion, set forth facts or questions of law that have not been, or reasons for believing that they will not adequately be, presented by the parties. While the motion states that the American Patent Law Association has approximately 2,200 members, it does not and cannot allege that the views in the amicus curiae brief represent the common interest of all or even most of these members as distinguished from the interest of those members who oppose petitioners' views. Since Rule 42(3) conditions the issuance of an order permitting a non-governmental interest to file an amicus curiae brief upon showing both an interest and the inadequacy of presentation of relevant law and fact issues by the parties, we believe there are no grounds for granting the motion.

There is no excuse for this failure to comply with Rule 42(3) because we expressly stated to Mr. Webb that he had no grounds for filing the present motion under Rule 42 in our letter of June 28, 1960 withholding consent. In this same letter we suggested that the association approach that party which its Board of Managers felt needed aid and help in the preparation of its brief.

In his letter of June 20, 1969 requesting our consent, Mr. Webb advanced as his sole reason for filing:

> The Government has strongly attacked the doctrine of contributory infringement. . . . [W]e feel that there is a considerable likelihood that the Supreme Court will make an important ruling with respect to this doctrine.

Mr. Webb also said:

> Our Association is not interested in intervening. Nor is it interested in arguing that either side should prevail because of the particular factual situation existing in this case.

We immediately recognized that the stated reason was insufficient under Rule 42(3). In addition, we suspected that he would represent that the APLA members were opposed to the position of petitioners, despite his statement to the contrary.

If we consented to the filing of a brief opposing our position, purportedly representing the interest of all APLA members, we would be in effect lending support to views against not only our interest, but also against what we believe to be the interest of the people of the United States. Moreover, we would be misleading this Court into believing that the views in the amicus curiae brief represent the interest of the overwhelming majority of APLA members when we know that many, if not most, members agree with our views.*

* Had the Board of Managers been really interested in learning the views of its members, it could have done so. Section 11 of Article XII of the Articles of Association of the APLA authorizes the Board to "ask for Association action at a special or stated meeting or by referendum vote" "[as] to policy matters upon which the Association has

Counsel for petitioners and his partner are members of the APLA. W. R. Hulbert, Esq., the master appointed by the District Court in its accounting order (R. 43), is also an APLA member. While we can't speak for Mr. Hulbert, we can say that counsel for petitioners and his partner do not support Mr. Webb's position of opposing the Government and petitioners.

In addition, H. P. Kenway, Esq., a member of the APLA Board of Managers, rendered a paid opinion to petitioners after the decision of the District Court solely on the issue of repair. In that opinion he stated that he thought replacing the worn fabric was a permissible repair and that the decision of the District Court should be reversed for that reason. Petitioners relied on that opinion in deciding to appeal the judgment of the District Court.

Mr. Kenway only recently told us that had the Government not entered as amicus curiae, the Board of Managers would not have voted to file an amicus curiae brief. We don't see how the Government's entry can bear on whether the parties will adequately present questions of law or fact relevant to the disposition of the case. The question for consideration under Rule 42(3) is whether these issues will be discussed adequately by the parties, not whether the leaders of a private organization of lawyers should be able to influence the outcome of the litigation by echoing the views of one of the parties. And when the leaders of that organization file a motion without regard to Rule 42(3) and act so as to place a serious question as to whether they obscure rather than expound the views of its members, we doubt that a brief endorsed by these leaders can be relied upon by the Court as an aid to resolving the import-

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not taken a position". None of these avenues was followed although certiorari was granted in February, an unsigned "Editorial Note" discussed the case in the March-April 1960 APLA Bulletin, and a national meeting of the APLA was held at the end of April where Association approval could have been but was not sought.

ant constitutional, statutory, economic and equitable issues presented for decision in this case.

Regardless of how other lawyers feel about the substantive issues in this case, we think that the overwhelming majority of lawyers would agree with us that it is at best unwise and probably improper for the leaders of an association of lawyers to use that association in support of views of one group of its members and oppose the views of a different group of its members by supporting one private litigant represented by an association member and opposing the private clients of another association member. By approving the filing of a brief supporting respondent, the Board of Managers and Mr. Webb have authorized using the dues of petitioners' counsel to oppose the latter's own clients.

We think that the remarks of Mr. Justice Frankfurter at the proceedings in his honor on April 30, 1960 in Cambridge concerning "the responsibility of the Bar, as inadequate advisers of amenable clients, for many . . . evils" are appropriate here. He said:

> Again and again I say to myself, and sometimes to a hospitable ear either to the left or right of me, "Why didn't this lawyer, in advising his client, consider beyond construction, whether it is right or wise?".

Respectfully submitted,

DAVID WOLF,
Counsel for Petitioners
68 Devonshire St.
Boston 9, Mass.

Of Counsel,
CHARLES HIEKEN
GEORGE L. GREENFIELD

ILE COPY

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1960

No. 21

ARO MANUFACTURING CO., INC., ET AL., *Petitioners,*

v.

CONVERTIBLE TOP REPLACEMENT CO., INC., *Respondent.*

BRIEF FOR THE RESPONDENT

ELLIOTT I. POLLOCK
Counsel for Respondent
904 Ring Bldg.
Washington, D. C.

PAUL V. POWER
82 Devonshire St.
Boston, Mass.,
Of Counsel.

PRESS OF BYRON S. ADAMS, WASHINGTON, D. C.

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BRIEF FOR THE RESPONDENT

STATEMENT

Respondent does not agree with the Statement of the Case presented by Petitioners, hereinafter called "Aro." The prime areas of disagreement relate to interpretations of various factual matters, and the status of the record, regarding the invention and the significance of the novel fabric here involved; as well as to Aro's allegations of misuse and impropriety arising out of a territorial grant to Respondent. Inasmuch as these areas of disagreement involve, essentially, an analysis of the record and the holdings below, the controlling facts will be set forth in detail, along with detailed references to the record, in the Argument; thereby to avoid complete repetition of these factual matters in a separate Statement.

COUNTERSTATEMENT OF QUESTIONS PRESENTED

Respondent submits that the questions actually before this Court should be stated as follows:

1. Where a case of repair vs. reconstruction presents a very complex factual situation, difficult to understand without actual inspection of the devices involved, is the rule of law stated by the Court of Appeals correct, namely that "each case must be decided on its own facts, pretty much as an individual instance"?

2. Is there contributory infringement where one sells a specially cut fabric which is the heart of a patented combination; which was intended for use in a "major reconstruction" of the combination; which had patentable novelty; and which was found by both Courts below, on the basis of all the facts of record, to meet the letter and spirit of 35 U.S.C. § 271(c) as well as every factual criterion listed in that statutory section?

3. Where no question of misuse arising from a territorial grant, or corporate relationships, was presented to the Court of Appeals for decision, is such issue properly before this Court?

4. If the answer to question 3 is in the affirmative, does respondents' good faith acquisition of a territorial portion of the patent, in accordance with 35 U.S.C. § 261, and Respondents' subsequent bringing of suit under the patent, comprise a misuse of the patent?

5. Where Congress, in enacting 35 U.S.C. § 271(c), limited the application of that statutory section to "a material part" of the invention, constituting a new element comprising a portion of the inventive contribution; and where the part sold by petitioners was the heart of the patented invention and had

"patentable novelty", does either the statute or its application in the instant case contravene Article I, §8 of the Constitution.

SUMMARY OF ARGUMENT

I. The Mackie-Duluk patent in suit, which both Courts below found valid and infringed, is characterized by a fabric top of entirely new shape, fastened to a conventional automobile in an entirely new manner. In finding that Aro infringed and contributorily infringed, the Courts below were not extending the protection of the patent to "unpatented material" nor were the Courts protecting mere fabric. The heart of the invention resides in a peculiar, characterizing, and unique *shape* and *fastening* of the top; *shape*, not mere fabric, was of the essence. It was this new Mackie-Duluk shape which Aro sold and installed, and which the Courts were protecting.

A. Although the industry had long recognized, and worked on, major problems inherent in prior convertible top structures, it was not until Mackie-Duluk that these problems were finally solved. The solution resided in the unique top shape and fastening which Mackie-Duluk finally suggested. The Trial Court termed Mackie-Duluk's solution "a substantial and enlightened step, filling a long-felt want".

B. The witnesses for both sides were unanimous that Mackie-Duluk's top shape and fastening was the heart of the invention, and the important part thereof. As one witness termed it, this new shape and fastening was a "revolutionary idea."

C. Both Courts below recognized that they were not dealing with mere fabric or unpatented material.

The Trial Court was concerned with a particular "cut of fabric"; and the Court of Appeals similarly was concerned with the top "of a particular form or shape". Both Courts found that this shape was entirely new, and the heart of Mackie-Duluk's invention. From both patent and economic standpoints, therefore, the Courts below were protecting the real invention in protecting the new shape here involved. As stated by Report of the Attorney General's National Committee to Study the Anti-Trust Laws (1955), p. 240:

> "In many instances the unpatented *element* involved in the contributory infringement suit is the **heart** of the patented *combination* and has no other substantial use, so that *relief for contributory infringement is in economic effect equivalent to relief for direct infringement.*" (Emphasis added.)

D. While Mackie-Duluk's new shape of top is used with a car body and bows, these latter structures are in themselves entirely conventional, capable of receiving tops of many different shapes, and not part of the invention. The car body and bows are no more than supports for the new top shape.

E. The other parts of the structure, including the "wiper arm" about which Aro argues, were found by the Courts below to be small, simple and minor parts. The real inventive concept resided not in the "wiper arm" or other minor parts, but in the new top shape.

F. The Courts below recognized that the patent claims in suit were combination claims; and that these claims described the new top shape in conjunction with conventional supporting elements. While Aro suggests that the Court misconstrued the patent, Aro is contradicted by the Government.

G. Aro and the Government suggest that Mackie-Duluk's new shape should be given no protection since that shape was not claimed alone. But the shape could not have been claimed alone due to semantic difficulties and Patent Office requirements respecting claim content. Congress, in enacting 35 U.S.C. § 271(c) recognized these problems; and the intent of Congress was to protect a new structure, such as Mackie-Duluk's unique top shape, even when claimed (as here) in combination with background elements. Aro and the Government ignore the clear legislative history in this respect.

H. The Government would ignore the fact that Mackie-Duluk's new top shape is the "heart" of the invention. However, cases of this Court (e.g., *Leeds & Catlin* v. *Victor Talking Machine*, 213 U.S. 325), cases of numerous Courts of Appeal, and the Attorney General's National Committee to Study the Anti-Trust Laws, agree that a combination *can* have a "heart", replacement of which (as done by Aro) is strong evidence of reconstruction. Congress reaffirmed these rules in 1952, intended to protect the "heart" of a patented combination by its enactment of 35 U.S.C. § 271, and expressly so stated.

II. Both Courts below found that Aro was not merely repairing, but was truly reconstructing the Mackie-Duluk invention by sale and installation of the heart of that invention. Since Aro was selling and installing the characteristic new top shape of Mackie-Duluk, the decisions below did not enlarge the patent monopoly to cover unpatented materials.

A. To term Aro's operation "replacement" is a misnomer. Aro's "replacement" tops, although having the unique Mackie-Duluk shape, otherwise always differed in style, construction, and mode of installation from original tops. Moreover, in "replacing" an original top with an Aro top of the new Mackie-Duluk shape, Aro sometimes added structural elements not present originally; and in other cases, removed perfectly good structural elements from the car. As a result, Aro's replacement operations, far from restoring the car to its original condition, actually resulted in formation of a "new article" so distinct that it could be distinguished from original and other replacement tops "two streets away."

B. As the Trial Court found, "the car owner, and defendants in his stead, did not have to subject themselves to replacement royalties if they did not want to. * * * If an owner does not want to replace with plaintiff's tops, he does not have to." Neither desires of car owners, nor car construction, nor economic considerations require the use of the special Mackie-Duluk shape at the time of replacement; and to the contrary, the use of a non-infringing shape has certain advantages at the time of replacement.

C. "Intention" is an important factor in resolving questions of repair and reconstruction. The record shows, and the Court of Appeals found, that Aro's operations "would be counted" a major reconstruction, not repair, by car vendors and owners, indeed by Aro itself.

D. Mackie-Duluk shaped tops last for years, and do not need "frequent" replacement. A car owner may never have to replace his original top. Replacements are effected by Aro, not for utility reasons, but to improve appearance; and Aro admits that, at the time of replacement, the original top is functionally "in perfectly good condition."

E. To replace an entire top, as Aro does, is time-consuming, difficult, and expensive; and must be performed by a specialist. "Repairs" in this field are far simpler procedures.

F. Specific showings are required of Aro to substantiate their claim of implied license to replace. Aro failed to carry its burden of proof in this regard.

III. The concurrent findings below, that the patent in suit was infringed and contributorily infringed by Aro, are in full accord with the decisons of this Court, and with standards which Congress re-enacted in 1952.

A. The Courts below were presented with a complex factual question, and were aided in their understanding of the facts by physical exhibits and demonstrations. In view of the history and progress of this litigation, the findings below should be accorded great weight.

B. The Government concedes that Congress, in enacting 35 U.S.C. § 271, "left intact the entire body of case law on direct infringement." Reconstruction, the issue in this case, is direct infringement. The decisions of this Court, as well as those of substantially every circuit, establish that the criteria applied by the Courts below, and "left intact" by Congress, were entirely correct and proper; as were the decisions below.

C. The Court of Appeals considered "all the facts and circumstances presented", and decided the instant case "on its own facts, pretty much as an individual instance." The decision, on its face, shows consideration of many factual circumstances additional to those which the Government suggests to be "the ground" of the decision (cf. U.S. Br., p. 2).

D. The Government suggests a new test for reconstruction (U.S. Br., p. 15). This new test would disregard all factual circumstances considered important heretofore, and is contradicted by the fact that Congress "left intact" the body of case law on direct infringement.

E. The legislative history, preceding enactment of 35 U.S.C. § 271, shows that Congress reaffirmed and re-enacted the criteria actually used by the Courts below herein. The Government's new test is at variance with this legislative history.

F. The Government's new test, allegedly based on *Wilson* v. *Simpson*, 9 How. 109, is actually contradicted by that case. *Wilson* v. *Simpson* established that factual considerations ignored by the Government, particularly the intention of the

vendor, are important; and further established that replacement of one part of a combination *can* be reconstruction.

G. Congress, in enacting the 1952 Patent Act, intended to strengthen the patent system. The legislative history shows that § 271 of the Act was intended to apply fully to replacement parts. The Justice Department presented to Congress the contentions which it presents here, and stated that the bill, if passed, "would inevitably restore" the doctrine of *Leeds & Catlin*, 213 U.S. 325. Congress nevertheless enacted 35 U.S.C. § 271. Being unsuccessful before Congress, the Justice Department now asks this Court to alter the patent law in a way that Congress was unwilling to alter it.

H. The misuse cases of this Court, such as *Carbice Corp.* v. *American Patents Dev. Co.*, 283 U.S. 27; *Motion Picture Patents Co.* v. *Universal Film Co.*, 243 U.S. 502; and *Mercoid Corp.* v. *Mid-Continent Co.*, 320 U.S. 661, are distinguished on their facts. Respondent does not sell, or require purchase, of any goods; and does not seek to protect unpatented materials from competition. Moreover Congress, in enacting 35 U.S.C. § 271(d), carved an exception to the anti-trust laws; and provided that Respondent's actions here do not comprise misuse or extension of the patent monopoly.

IV. The real issues here are limited. The only question which should properly be considered by this Court is the "basic question" recited by the Court of Appeals and argued before it.

A. The "basic question" argued before the Court of Appeals was the sole question presented

to that Court by Aro for decision. No questions of constitutionality, patent validity, standard of invention, impropriety, misuse, antitrust violation, or construction of a license or release were presented; and appear to have been afterthoughts by Aro here.

B. In stating that this court need not consider § 271(c) if it rules that Aro merely repaired, the American Patent Law Association (APLA Br. 2-3) has apparently overlooked that Ford cars were unlicensed. Even if this Court disagrees with the findings of "reconstruction" below Aro is still clearly liable under § 271(c) for its operations on *Ford* cars; for these cars were, from their inception, *infringing* structures. The Government would appear to concede that its test does not extend to Ford cars, and that Aro should still be liable as to them.

C. Aro's contentions of impropriety were not made an issue below, and are totally unfounded in law and fact. Aro misstates the record and, moreover, departs from the record. Respondent's acquisition of territorial rights is authorized by statute (35 U.S.C. § 261); and such transfer of title can (as here) properly include rights for past infringement, *Crown Die & Tool* v. *Nye*, 261 U.S. 24. Aro's allegations will be analyzed, and shown to constitute more "irresponsible statements" which, the Trial Court noted, has characterized certain aspects of Aro's defense in this litigation (R. 45-7).

V. Since the power of Congress in the field of patents is plenary; and since Congress, in enacting 35 U.S.C. § 271(c) was protecting "new" components albeit claimed in combination with other elements § 271 is clearly constitutional.

ARGUMENT

I. THE NATURE OF THE MACKIE-DULUK INVENTION

A. The Mackie-Duluk Invention Solved Long-Standing Problems in the Prior Art

There were a number of major problems and difficulties inherent in prior art convertible tops (R. 35), and prior to Mackie-Duluk "the general industry had been working for years on the problem" (R. 371) without any solution, even though "the very best engineers * * * in the body engineering department [worked] on convertible tops" (R. 381). Mackie-Duluk's top was the first "real solution" to these problems (R. 394). The Trial Court found that "Mackie-Duluk solved all of these difficulties" (R. 35); and that "Mackie-Duluk was a substantial and enlightened step, filling a long felt want" (R. 34).

B. All Witnesses Below Agreed That the Mackie-Duluk Fabric Shape and Fastening Was Entirely New, of Major Importance, and the Heart of the Invention

The essential feature, the heart of the Mackie-Duluk invention, lay in the provision of a fabric top of new shape, characterized by certain elongated flaps of material adapted for permanent attachment within the car. *Every witness* agreed that the unique fabric shape of Mackie-Duluk, and the form of attachment afforded thereby, was of primary importance. Thus, Petitioner Harold Shapiro testified (R. 85):

> "Q. Am I correct in stating that one of the important improvements in folding tops of the type used on the 1952, 1953 and 1954 Fords, by way of example, is the fact that fabric comes down into the car and is fastened on the inside of the car so no water can get on the interior of the car itself and any water which does seep down past the fabric goes into the trough?
>
> "A. That is correct.

"Q. Does the idea of having *a section of the fabric coming down inside the car and actually fastening on part of the car*, for instance, adjacent to the trough, *is that the important thing*?

"That is correct." (Emphasis added.)

The 1952-4 Ford and Mercury convertibles, about which Petitioner was testifying, all had conventional bodies and linkages of identical construction and size. A single Aro top (Model 134) fits all these cars (R. 50-2); and Aro's Top No. 134 fits no other cars (R. 120).

The witness Booth, on cross-examination by Aro's counsel, testified (R. 171-2):

"Q. You spoke before as to the importance of the fabric itself. You said, I think you used the terms 'special shape' and 'arrangement' formed an important part of this invention or this device; is that correct? A. Yes.

"Q. Could you once again describe what you consider to be *the most important part* of this particular arrangement of the fabric, itself?

"A. Well, I would consider *the most important part to be the provision of a flap at the rear quarter extending down into the interior of the automobile body and connected at a point below the belt line to the automobile body.*" (Emphasis added.)

Petitioner George Shapiro testified that the important improvement effected by Mackie-Duluk resided in the novel way the fabric was secured to the car (R. 49). See also the testimony of Aro's expert witness Brosens regarding the importance of the fabric arrangement (R. 323). Indeed the record shows beyond any doubt that the new shape of fabric, and its novel mode of attachment, was "the fundamental con-

cept," the "real crux of the whole thing," and a "revolutionary idea." See Pickard's testimony (R. 398-9):

> "XQ. [by Mr. Wolf] * * * *Will you agree* that *the fundamental concept* * * * was the attachment of the fabric below the body line a sufficient distance to permit raising and lowering the top; is that right?
>
> "A. Yes. * * * That was *the real crux* of the whole thing. That was *the revolutionary idea.*" (Emphasis added.)

C. Both Courts Below Found That the Mackie-Duluk Fabric Shape and Fastening Was the Crux of the Invention

The Trial Court noted that the peculiar fabric shape, or "cut of fabric" as the Court termed it, about which the witnesses had been testifying, was entirely new in the art (Transcript, p. 749):

> "The Court. That really is one of the differences between *the Mackie-Duluk cut of fabric* and many of the other patterns, particularly Bessonneau, there is no thought of running the fabric down to the axis point, to the further point." (Emphasis added.)

And the Trial Court expressly found that this new shape, and the mode of installation afforded thereby, was of major importance (R. 37):

> "Defendants point out that if the flap was extended further downward, permanently attached to a trough and a wiper arm added, one would have Mackie-Duluk. *They then seek to depreciate the importance of permanently fastening the fabric, with which I disagree.*" (Emphasis added.)

In finding contributory infringement, the District Court also found that Aro had made "a material part"

of the invention (R. 38); and that the fabric shape was "useless" except in the Mackie-Duluk arrangement. (R. 41)[1]

The Court of Appeals found that the Mackie-Duluk patent, although claiming a combination of structure, was concerned with "the fabric part of such a top of a particular form or shape"; noted that "the patentees *were the first* to extend the flaps * * *" etc.; and further found that this new fabric shape had "patentable novelty" (R. 651).

Hence, all witnesses, and both Courts below, have uniformly agreed that Mackie-Duluk's peculiar fabric shape and fastening constitutes the heart, crux, and dominant part of the invention; and is entirely new.

In its Memorandum in Support of the Petition for Certiorari, the Government conceded (p. 5):

> "If tops of the shape employed in respondent's combination patent were themselves patented, petitioners unquestionably infringed the patent when they manufactured and sold, as was found, fabric tops of such shape."

We have, in the instant case, the full equivalent of the foregoing, from both patent law and economic standpoints, for the new shape of fabric constituted the "heart" of Mackie-Duluk's invention. As stated in the Report of the Attorney General's National Committee to Study the Anti-Trust Laws (1955), p. 240:

> "In many instances the unpatented element involved in the contributory infringement suit is the

[1] Aro in effect challenges this finding of fact, at this late date in arguing (Aro's Br. p. 48) that "The specially designed unpatented top fabrics are in their essential nature suitable for noninfringing use." The record and findings below are clearly to the contrary.

heart of the patented combination and has no other substantial use, *so that relief for contributory infringement is in economic effect equivalent to relief for direct infringement.*" (Emphasis added.)

Only some combination patents include a "heart," and some do not, e.g., a new combination consisting entirely of old, well-known elements. However, when a "heart of the patented combination" does exist, it is in effect the invention itself; and *when it is gone, so is the invention gone.* When a Mackie-Duluk type fabric, the heart of that invention, is stripped from the car, the Mackie-Duluk invention is itself destroyed.

D. The Car Body and Bows Are Merely "Background" for the Novel Fabric

The Trial Court at test demonstrations (R. 183 et seq., 206 et seq.), saw that the car body and bows were no more than entirely conventional structures acting as supports for the novel Mackie-Duluk fabric; and the Trial Court specifically found that the car body and bows were "standard" and of no significance in evaluating the real invention (R. 38).. See also R. 143-4. These other parts were analogous to conventional "poles" supporting a quite new "tent" fabric.

E. The Wiper Arm Has the Same Importance in the Mackie-Duluk Arrangement as the Other Bows of the Top Structure

By reason of the unique shape of fabric which characterized the Mackie-Duluk invention, a portion of fabric was provided on the car interior at a place where fabric had never before been located. In the art of convertible tops it is elementary that, wherever

there is a large expanse of fabric, a bow is desirable to hold the fabric in place. Hence, in order to minimize gaps in the new region of fabric resulting from the new fabric shape, Mackie-Duluk provided a so-called "wiper arm" which, except for its new location, acted as any other conventional bow, i.e. to hold the fabric in place (R. 276). The Court of Appeals expressly found that the wiper arm was "an additional low, rearward bow" (R. 650). The invention, however, lay in the provision of the entirely new fabric shape and fastening; for, as Aro's own expert witness testified, without this unique fabric shape there would be no purpose whatsoever in the wiper arm (R. 329). Petitioner Harold Shapiro characterized the wiper arm as "immaterial" (R. 83).

F. The Courts Below Correctly Construed the Patent in Suit; Petitioners Distort This Construction and Are Contradicted By the Government

In arguing that the Courts below should have given no weight to the importance of the fabric, or its novelty, Aro's brief pp. 11-20, discusses what it conceives to be the intent of the Patent Act in protecting an invention. Aro's statement of the statutory plan is, however, incomplete. True, the Commissioner of Patents, acting through an examiner, is vested with authority to grant a patent. But the authority to decide what is an infringement is left to the courts; and, when one of the issues is contributory infringement, as here, the *court* must decide if the defendant has sold "a component * * * of a combination * * * constituting a material part of the invention * * *" (35 U.S.C. 271c).

The claims in suit cover a combination, one element of which is a fabric top of unique shape. This new

fabric was the "heart of the invention", entirely novel, and the one component which characterized the invention and brought success out of failure. Nevertheless, although Aro's brief, page 8, would suggest that the Court of Appeals construed the claims as covering the fabric alone, the Court clearly recognized that they were dealing with a combination patent (R. 650). Indeed the Government's Memorandum in Support of the Petition for Writ of Certiorari, page 5, itself so states:

> "The court below, while referring to the flexible top material as having 'patentable novelty' (pet. .28) did not hold that this material was *patented* * * *. In fact the court implicitly held that the fabric part of the top was not itself patented."

The Court of Appeals clearly stated, in its recitation of the "basic question" argued (R. 648-9), that it was examining one component of a patented combination to determine whether, under § 271(c), sale of that component rendered Aro liable as a contributory infringer. In commenting, the Court paraphrased § 271(c), and sometimes referred to the fabric top as "a patented component" thereby recognizing the nature of 35 U.S.C. § 271(c), i.e. that it relates to "a *component* of a *patented* machine," etc. The Court, however, used the term "patented component" only to refer to a component meeting all the factual criteria of § 271(c); and this is quite evident when the entire decision is read in context, e.g. the Court, in referring to the fabric top, characterizes it as "a patented component of a patented combination" (R. 654), or as a "component of the patented combination" (R. 655).

It is clear, therefore, that the Court of Appeals had a true appreciation of the patent, and its nature; and in holding Aro liable, in light of the factual circumstances considered, was doing precisely what 35 U.S.C. § 271(c) required.

G. The Repeated Assertion That the Fabric Shape Alone Should Have Been Claimed Is Incorrect and an Oversimplification

The Courts below found that Aro's operations, in selling the heart of the Mackie-Duluk invention, met both the letter and spirit of § 271(c); and that Aro was a clear contributory infringer. Aro was selling the novel element of Mackie-Duluk for installation in the unique way taught by Mackie-Duluk; and this element was the characterizing portion of Mackie-Duluk, and "useless" except in the Mackie-Duluk arrangement. Violation of § 271(c) seems to be beyond question. However, in view of Aro's arguments regarding the intended scope of the statutory section in question, some further analysis of the claimed subject matter follows.

Both Courts below found that Mackie-Duluk's claims set forth with specificity the unique and entirely novel fabric shape which distinguished Mackie-Duluk from all other prior tops. The claims also include standard mechanical elements, by which various portions of the newly shaped fabric are identified as to position and function; and the recitation of these other standard elements assists in the definition of the fabric shape by clarifying just where various parts of the newly shaped fabric go, and what they are for.

This character of the claims here involved is the ordinary circumstance in cases involving contributory infringement, for when such a cause of action arises,

the claims often include background elements which the contributory infringer does not himself supply. Thus, in *Morrin* v. *Robert White Engineering Works*, CA-2, 143 Fed. 519, the Court noted:

> "* * * The tiers of generating tubes of the so-called 'ogee' form constitute the vital element of the combination. It was this which made it patentable. *In order to describe the invention intelligently it was necessary to show an upright generator cylinder as a support for the tubes,* but the improvement over the prior structure and the advantages resulting therefrom are all found in the new tube which permitted this arrangement in tiers as shown." (Emphasis added.)

And in *K. W. Ignition Co.* v. *Temco*, CA-6, 283 Fed. 873, 880, the Court noted:

> "It is true that each claim of plaintiff's patent states a combination 'in automobile construction' or 'in an automobile' and that in each claim the leaf spring of the automobile and its axle are included. But it is only in a highly technical sense that the patent can be regarded as upon an automobile. * * * The automobile is just as much an automobile without the absorber as with it, and was constructed and sold in the same way, whether or not shock absorbers like plaintiff's were to be applied."

By its enactment of 35 U.S.C. 271(c), Congress showed that a part, claimed in combination with other parts, was to be protected *per se*, provided the factual criteria of that section were met. There is no merit, therefore, in the suggestions of Aro and the Government, that a part must be claimed by itself before it is protected; for the intent of Congress, expressed in the Patent Act, is clearly otherwise.

Moreover, Congress recognized that, in a highly technical sense, the article comprising the contributory infringement would itself be "unpatented." See Federico, Commentary on the New Patent Act, 35 U.S.C.A. preceding § 1, at p. 53:

> "The thing sold is presumably *not itself patented* since if it were patented the question of contributory infringement, as distinguished from direct infringement, would scarcely arise and the paragraph would have little or no apparent purposes." (Emphasis added.)

And this Court, in *Mercoid Corp.* v. *Mid-Continent Inv. Co.*, 320 U.S. 661, 668 fn. 1, was of a similar view:

> "The Court [in Leeds & Catlin] was chiefly concerned with the proposition that a substitution or renewal of *an unpatented element of a combination patent*, as distinguished from its repair, is a 'reconstruction' of the combination." (Emphasis added.)

The repeated characterization of the novel fabric, by both the Government and Aro, as an "unpatented" part, can therefore have no bearing on the instant case, so long as the facts involving the particular fabrics sold by Aro otherwise meet the precise tests of § 271 (c); and the Court of Appeals has expressly found that they do (R. 654-5).

The Government states, however, (U.S. Br. p. 5, fn. 4) that the patentee "could have secured a patent monopoly on the fabric shape by claiming the fabric top shape alone"; and Aro's brief pp. 20, 29 makes similar such contentions. These assertions reflect no appreciation of existing Patent Office restrictions, a problem which § 271(c) was intended to obviate.

The problem is described by Mr. (now Judge)* Giles S. Rich at p. 4 of the Hearings on H.R. 3866, 81st Cong., 1st Sess. (1949):

> "Now, coming back to our kerosene lamp, when the patent was obtained it described a complete lamp.
>
> "There is *a rule in the Patent Office* that a claim must be complete. It must describe or define the complete operative mechanism, so one of the elements of this complete lamp is a chimney.
>
> * * * *
>
> "The invention of the lamp, of course, was not in the base, which was nothing but a container for the kerosene, and it was not new, it was as old as the hills. But an improvement in the burner mechanism was new. But to describe a complete lamp you have to include the base and the chimney or it does not work. You cannot have a lamp with nothing but the burner mechanism, *so those elements were in the claim.*" (Emphasis added.)

And at p. 7, *ibid*, Judge Rich further commented:

> "There are situations in which you cannot meet the requirements of the Patent Office without bringing in other elements than the thing which you actually have invented.
>
> * * * *
>
> "[One may be] compelled by the rules of the Patent Office to include these other elements in order to describe completely the operative mechanism."

The result of the foregoing Patent Office rule, which the Government and Aro ignore, is further described

* Of the United States Court of Customs and Patent Appeals.

by Judge Rich at pp. 11-12, *ibid*, regarding a novel switch:[2]

> "Mr. Boggs: Do you mean to say that he just could not go to the Patent Office and get a patent on that switch, period?
>
> "Mr. Rich: Period.
>
> "Mr. Boggs: He could not do that?
>
> "Mr. Rich: No, *because it would be at loose ends*, and in the opinion of the patent examiners you cannot claim a number of switches having wires to them without saying *where the wires go and what they are for.* * * *
>
> "Mr. Goodwin: Then why is not the situation in that case this, that the patentee is using his ingenuity, his energy, and his brains to secure a patent on something which, as a practical matter he never can protect himself on?
>
> "Mr. Rich: That is the situation today, and for that very reason the stimulus of the patent system is removed from certain fields, where, when you have to exercise your muscle, perspiration, and ingenuity, you have to describe the invention in such a way that you include things that you have to rely on other people to supply." (Emphasis added.)

In urging, therefore, that Mackie-Dulnk should have claimed "the fabric top shape alone," the Government and Aro express a generalization which, upon examination, reveals itself to be an impossibility due to limitations in the English language, and to restrictions imposed by Patent Office practice. And in further urging that, absent a claim to the fabric shape alone, no protection should be given the patentee, the Government

[2] It should be noted that this testimony directly contradicts Aro's assertion, brief p. 37, that Judge Rich did not suggest "that the patentee should be excused from patenting the furnace thermostat alone if that were the part he wished to monopolize."

and Aro ignore the language and intent of § 271(c), and seek to remove the stimulus of the patent system from those areas in which § 271(c) was intended to restore such stimulus.

H. There Can Be a "Heart" of the Invention, as in the Instant Case; and Congress Intended to Protect It

The Government's Brief, pp. 13-14, argues that it should make no difference that the part which Aro replaced is "essential," or the "distinguishing" part of the combination, or the "gist" or "heart" of the invention; and further, that such a part should be given no more significance than other parts of the combination since "all components are equally a part of the whole, and are equally 'essential.'" In so arguing, however, the Government disregards one of the very purposes of 35 U.S.C. § 271(c), and the intent of Congress in enacting the statute, as expressed in House Report No. 1923 and Senate Report No. 1979, accompanying H.R. 7794, 82nd Congress (1952):

> "One who makes a special device constituting *the heart of a patented machine* and supplies it to others with directions (specific or implied) to complete the machine is obviously appropriating the benefit of the patented invention." (Emphasis added.)

And in further stating (U.S. Br., p. 15) that a replacement manufacturer such as Aro, supplying the heart of the invention, but not some other standard part, shall never be considered to have done anything improper, the Government ignores one of the prime considerations leading to enactment of § 271(c), expressed by Judge Rich (Hearings on H.R. 3760, 1951, p. 153):

> "If the part he [a manufacturer of replacement parts] is supplying *is in substance the very thing which was invented*, it seems to me personally that he is an infringer, and he should not be let off on some little technicality that there is *something minor* in the whole apparatus that he is not supplying."[3] (Matter in brackets and emphasis supplied.)

Indeed, the Report of the Attorney General's National Committee to Study the Anti-Trust Laws (1955), p. 252, states:

> "Our concern is only with the apparently inherent conflict between contributory infringement and the misuse doctrine, a conflict which has stressed the need for limitations upon the scope of the misuse doctrine to place contributory infringement in the proper context of joint tort rules generally. In many instances *the unpatented element* involved in the contributory infringement suit *is the heart of the patented combination* and has no other substantial use, so that relief for contributory infringement is in economic effect equivalent to relief for direct infringement. * * *" (Emphasis added.)

In *Leeds & Catlin Co.* v. *Victor Talking Mach. Co.*, 213 U.S. 325, this Court expressly noted, and considered

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[3] Whether something is "minor" in the apparatus is, of course, a question of fact. The Court of Appeals found that "the fabric portion of the top is *not* a minor [part]" (R. 655).

A "minor" part according to Judge Rich was a minor part of the inventive concept. Thus, in discussing his kerosene lamp illustration (1949 Hearings, p. 6), Judge Rich made it clear that the base and chimney were minor parts even though physically they were far larger than the burner which embodied the inventive concept. Similarly, in his *Mercoid* illustration (1949 Hearings p. 11) Judge Rich made it clear that even though the switch was applied to a furnace, the furnace was still a minor part of the combination although far larger and more costly than the novel switch.

significant, that the part there replaced served "to distinguish the invention—to mark the advance upon prior art" (p. 330) and that it was "the distinction of the invention" (p. 335).

And the Courts of Appeals have consistently been of a similar view, i.e. that replacement of "the heart of the invention," or parts of similar importance, is strongly indicative of "reconstruction." In *Davis Electrical Works* v. *Edison Electric Light*, CA-1, 60 Fed. 276, 280, the Court emphasized that it was dealing with "the essence" of the invention; and that, while in many combinations the elements thereof may be "of equal value," this is *not* the case in every combination. Indeed, the Court stated (p. 280):

> "So, ordinarily, if the *new element* in a combination is associated in the claim with additional elements which, in the state of the art, there is no practical method of replacing by others, *the patentee obtains the same practical advantages as though this new element had been claimed alone*,—at least until the art makes new discoveries * * *. We do not in terms give the patentee the benefit of a claim for the filament alone, nor prohibit its use in some other combination * * * if some ingenious way of making such other combinations is ever discovered." (Emphasis added.)

The 2nd Circuit, in *Morrin* v. *Robert White Engineering*, CA-2, 143 Fed. 519, found reconstruction when the part replaced was "the *vital element* of the combination," and when the combination had been reconstructed "in all of its novel features." (Emphasis added.)

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[4] It must be recalled that the District Court found the special Mackie-Duluk fabric, the heart and essence of the invention to be "useless" except in the Mackie-Duluk arrangement (R. 41).

The 6th Circuit, in *Automotive Parts* v. *Wisconsin Axle*, CA-6, 81 F. 2d 125, 127, stressed that reconstruction occurs when the parts replaced "*dominate* the structural substance of the whole." (Emphasis added.)

The 10th Circuit, in *Williams* v. *Hughes Tool Co.*, CA-10, 186 F. 2d 278, 284, certiorari denied, 341 U.S. 903, found reconstruction by defendants replacing "*that element * * * wherein lies the novel features of the combination.*" (Emphasis added.)

Indeed, this Court in *Union Paper Bag Machine Co.* v. *Murphy*, 97 U.S. 120, 125, in considering a question of infringement (which, of course, is the very issue involved in "reconstruction") said:

> "Inquiries of this kind are often attended with difficulty; but if special attention is given to such *portions* of a given device as really does the work, *so as not to give undue importance to other parts of the same which are only used as a convenient mode of constructing the entire device*, the difficulty attending the investigation will be greatly diminished, if not entirely overcome." (Emphasis added.)

The concurrent findings below are in full accord with all of the foregoing authorities; for the specific Mackie-Duluk fabric shape and fastening is, in fact, the "heart," "essence," "vital element," "dominating part," and "novel feature" of Mackie-Duluk.

II. SINCE ARO WAS RECONSTRUCTING THE VERY DEVICE PATENTED, THERE IS NO QUESTION IN THIS CASE OF ENLARGING THE PATENT MONOPOLY TO COVER UNPATENTED MATERIALS

A. Aro Does Far More Than Mere "Replacement" of the Original Top; Aro in Fact Made Such Extensive Changes That They Produced a "New Article"

Petitoners herein comprise a corporate defendant, Aro Manufacturing Company, and a plurality of individual defendants forming a sales partnership, Aro Top Sales Company. Aro manufactures approximately 140 different replacement top fabrics designed for installation on automobiles of various different models and years (R. 116). Of these 140 fabrics, only seven fabrics were involved in this case (R. 117).[5] These seven specially shaped fabrics, the heart of the Mackie-Duluk invention, were prepared from Aro's own special patterns, for installation on only those cars here involved; and did not fit any makes or models of cars other than those for which they were specially designed by Aro (R. 117).[6]

Aro promoted the sale, and induced installation of their seven special Mackie-Duluk type fabrics by advertising (e.g. R. 463 et seq.). by demonstration clinics

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[5] *Only six* of these seven fabrics were found to be contributory infringements; and the record is, even now, *incomplete* as to the seventh fabric (for certain G.M. cars), the Trial Court having required the taking of additional evidence relating thereto (R. 43, item 5).

[6] Aro's brief, p. 2, question 1, acknowledges that the Aro top fabrics, here involved, were "*especially cut* and *intended for use* in convertible automobiles having the patented combination." Aro's brief p. 47 attempts to confuse this situation by arguing that their special tops may "by happenstance" fit other cars; but the Trial Court actually found that Aro's tops were *useless* on such other cars (R. 41, par. 8).

(R. 109) and by instructions (R. 259-60). These activities constituted a clear violation of 35 U.S.C. § 271(b), which provides that "Whoever actively induces infringement of a patent shall be liable as an infringer."

In addition, Aro maintained a "trim shop" wherein they actually installed their special fabrics, comprising the heart of the invention, on cars of all the years and models here in question (R. 107-8, 134). In so installing tops, Aro was itself making the patented invention; and was thereby a *direct* infringer, in violation of 35 U.S.C. § 271(a) (Aro's brief p. 76).

Aro, by all of the foregoing activities, induced persons to produce, and Aro itself produced, a completely new structure covered by the Mackie-Duluk claims, albeit in some cases different claims from those which had covered the original structures. For example, claim 10 of the patent includes not only the special fabric, but also an improvement feature, i.e. "a deformable element" such as part 27 on the patent drawing (R. 589). Most of the claims make no reference to the "deformable element" or to a "sealing strip" (U.S. Br. p. 5, f.n. 3). Original 1954 Fords did not have this improvement, and did not infringe claim 10 (R. 41, line 1; 192). Aro's replacement of tops on these cars, in their own trim shop, included a "shingle" found to be the equivalent of the deformable element (R. 39), wherefore Aro *added* a part not even present in the original; and thereby caused a "replaced" 1954 top to infringe claim 10, even though the original top did not.

Each claim of a patent is for a separate invention. *Leeds and Catlin Corp.* v. *Victor Talking Machine Co.*, 213 U.S. 301. Hence, an implied license under one claim of a patent never extends to another, *Priebe & Sons Co.* v. *Hunt*, CA-8, 188 F. 2d 880, 885; *Hunt* v.

Armour & Co., CA-7, 485 F. 2d 722, 729; *Smith America Corp. v. Bendix*, 140 F. Supp. 46, 54. Aro obviously had no license, implied or otherwise, to add the "deformable element" of claim 10, an improvement feature, to cars that did not have it originally.

The record further shows that Aro's seven specially designed fabrics, although embodying the heart of the invention i.e. the unique Mackie-Duluk shape, did not otherwise correspond to the original fabrics on cars for which they were designed; and the seven Aro fabrics here involved differed in style, construction and method of installation from the original fabrics (R. 624, 626, 628-33, 640-1) to such an extent that when installed, they could be distinguished from original and other replacement tops "two streets away" (R. 631). One purchasing one of these seven fabrics for installation on his car, thus ended up with a structure which was always *different* from his original structure, namely Aro's *own distinctive version* of Mackie-Duluk.

Some typical testimony of Petitioner Harold Shapiro, selected from R. 629-31, aptly summarizes the foregoing situation:

> * * * "We don't install and we don't make our tops, as far as installations, like the original factory."
>
> * * * "There is no trimmer in the country who would spend the time to reinstall a new top like in the factory. I can't go into detail because there are too many bolts and nuts to talk about."
>
> * * * "He could not install it like the factory because we don't make it the same way."
>
> * * * "We made a top for the 1952 [Ford] car, which was completely redesigned in 1953; that is, the seam structure. Actually, the size has to be

the same because it is going on the same frame, but the seam structure and the structure of the rear valance and rear curtain have been changed, and we did away with the cushion and came out with the shingle, and then we did away with the shingle. In other words, we probably had five patterns made of that particular model car, 134."

* * * "I can personally spot one of our tops two streets away," * * *

In addition to changes in construction, extensive styling changes were made. The "replacement" tops sold by Aro were offered with rear curtains of various different shapes and styles, in various fabric materials and plies, in many different colors and color combinations including "Two-Tone" tops, and even in "a variety of intriguing plaids" said to be "as smart and colorful as the Black Watch Highlanders Band" (R. 463-71).

Moreover, Aro sold and installed more than just one part of the combination.[7] Aro's tops, with a "cushion" or "shingle" thereon (R. 39 et seq.), embodied two elements of some of the claims, e.g. both the special fabric and an element equivalent to the "sealing strip." cf. U.S. Br. p. 5, fn. 3. Indeed, in their installation activities, Aro, using a changed fabric which they have

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[7] Aro's advertising literature states (R. 463-4):

"Every Aro Top comes in a neat, complete package ready to install, with simple, easy instructions enclosed. Package consists of

(a) top deck assembly
(b) back curtain
(c) all fasteners accurately installed
(d) tacks
(e) finish lace, tips and nails
(f) heavy duty zipper curtain most cars
(g) detailed illustrated sheet giving clear, easy to follow instructions for installation"

devised in "an attempt to avoid infringement" (R. 39, fn. 9), apparently even *removed* perfectly good parts from the car, as described by Aro's counsel (R. 475):

> "In installing this top in automobiles having elements similar to those as shown in Figure 2 of the Mackie patent, *the rubber molding elements 27 are first removed* in order to make room for the flap member."

The "deformable element," e.g. of claim 10, though not worn out, was thus removed from cars which had such an element, and replaced by Aro's equivalent flap. Such removal of good parts is strong evidence of reconstruction, *Connecticut Telephone & E. Co.* v. *Automotive E. Co.* (D.C. N.J.), 14 F. 2d 957, 964; aff. 19 F. 2d 990, cert. denied 275 U.S. 564. Indeed, both *Wilson* v. *Simpson*, 9 How. 109, and *Leeds and Catlin*, 213 U.S. 325, held that replacement of a distinctive *unworn* element is reconstruction.

In view of all the foregoing circumstances, it is clear that the term "replacement" is a misnomer insofar as Aro's *particular* tops, held to be contributory infringements and reconstructions of the invention, are concerned; and Aro, using their special tops, did "in fact make a new article" (cf. U.S. Brief 12, 15),[8] a "new

[8] The Government's brief, p. 12, cites a passing comment of Judge Hand to the effect that one may replace worn parts unless he produces a "new article," that is unless he reconstructs. Where, as here, Aro changes both style, and construction, the changed new top is clearly more than a repair. Certainly the purchaser considers that he has a new and different top—indeed a new article.

Changes in a structure, under the guise of repair, are strong evidence of "reconstruction," *George Close Co.* v. *Ideal Wrapping Machine Co.* CA-1, 29 F. 2d 533, 534-5, *Miller Hatcheries* v. *Buckeye*, CA-8, 41 F. 2d 619. Since replacements are made long

article" so distinct that it could be distinguished from original and other replacement tops "two streets away." (R. 631).

B. Neither Desires of Car Owners, Nor Structure of the Car Nor Business Practicalities in the Industry Require Replacement of Original Tops With the Special Mackie-Duluk Fabric

Parts of a car which require replacement from time to time are mounted in an easily removable and replaceable manner. In sharp contrast, the Mackie-Duluk shaped top fabric is not so mounted; and the trial judge was able to appreciate this from his own observations at the test demonstrations. The special fabric, the heart of the invention, is *permanently* attached (R. 86, 192) and the patent so states: "The top fabric is *permanently* fastened by rivets 21 to the rain trough." (R. 593, col. 2, line 47, emphasis added.) Neither Ford nor General Motors arranged the car or fabric to facilitate replacement of the original fabric, and there is nothing in the record to suggest that either the manufacturer or purchaser of a car expected that a new Mackie-Duluk was necessary or would be applied.

The Trial Court specifically found that the "car owner, and defendants in his stead, did not have to subject themselves to replacement royalties if they did not want to. * * * If an owner does not want to replace with plaintiff's tops, he does not have to." (R. 39, fn. 8). The Court of Appeals also noted this fact (R. 655, fn. 4).

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before needed for utility reasons (R. 33, 655), Aro must argue that replacement merely to preserve appearance is "repair". If appearance is that important, however, then Aro's *changes* in style produced a "new article." Aro's argument defeats itself.

In making an entire top "replacement," Aro (and trimmers using their tops) first completely strip the original top fabric from the car, leaving only a conventional frame structure (R. 50, 143-4) having "standard" bows thereon (R. 38). When the car is so stripped, the heart of Mackie-Duluk's invention is gone; the invention is completely destroyed, and no longer exists.[9] All that remains is, what Aro terms "background elements" (Aro's Br., p. 35). The car in its stripped state can, without any change whatsoever, receive an entirely conventional top fabric of the so-called "snap fastener" type; and the car has "boot studs" thereon adapted to receive such a prior art shaped fabric (R. 124). Indeed, Petitioner Harold Shapiro has himself stated (R. 124):

> "* * * the way it [the car] is constructed now, it has been used in both manners of installation."

Given the choice of installing either an infringing or non-infringing shaped fabric on the conventional cars here involved, Aro chose the infringing fabric shape even though a number of factors forcibly dictated otherwise. In particular, Aro admitted, and the Trial Court found, that once a car has been stripped of its original top, it is cheaper and an easier installation to rebuild the structure in a non-infringing way using a snap fastener type top, than in an infringing way using a special Mackie-Duluk type top (R. 39, fn. 8, 124-5, 213). Indeed, the use of a non-infringing top, at the time of replacement, produces a structure which, ac-

[9] Aro's brief, p. 46, states that cars "separate from the [Mackie-Duluk] top fabrics" do not have the invention thereon, and states that one would have to be "instructed * * * how to install the top fabrics to form the patented combination."

cording to Aro, is "1000 per cent more rain-proof" than the original construction (R. 213).

As discussed in more detail at p. 4 of Respondents Reply to the Memorandum Amicus Curiae, the public does not insist on a replacement with a special Mackie-Duluk fabric. Indeed Petitioner Harold Shapiro, speaking of the prior art top which Aro could have installed, said "There is no reason for not making it" (R. 124).

The foregoing is readily understandable from the findings below. The original top lasts for a period of *years* (R. 655). The car owner, at the time replacement is even first contemplated, is already possessed of an old car, years "out-of-style," and if the owner is "a person not too fastidious as to appearance" (R. 655), the car may be even years older. Upon considering replacement at all, therefore, the car owner is less concerned with mounting a particular shape of top fabric than he is with restoring the style, or appearance (R. 33, 41 fn. 10) of his aging car at least expense and difficulty. Such a less expensive and easier installation is, however, effected through use of a non-infringing shaped fabric rather than a special Mackie-Duluk fabric (R. 39, fn. 8).

C. There Was No Intention on the Part of Vendors, Owners or Petitioners to Replace With the Special Shaped Fabrics in Issue

Aro urged that the Court of Appeals consider "the normal expectation of vendors [and "of purchasers"] of convertible automobiles" (R. 645). In the instant case, however, there is not a scintilla of evidence showing that the original manufacturer, or the subsequent car owner, contemplated at the time of original sale

that the top fabric had to be replaced with the specially shaped fabric, the heart of the invention, here involved. Indeed, the normal desires of car owners, as discussed in the preceding section, are to the contrary.

Insofar as Aro's intent is of interest, Aro well knew that there "is no reason" for replacing with the specially shaped fabric (R. 124); and that a non-infringing replacement is cheaper, easier, and, at the time of replacement, apparently has certain functional advantages (R. 213).

Nor can it be said that the patentees intended any replacement of the fabric. To the contrary, Mackie-Duluk expressly described the fabric as "permanently" fastened in place (R. 593, col. 2, lines 47-8).

The Trial Judge expressly inquired, *inter alia*, into the intentions and general expectations of car owners and car vendors regarding replaceability of tops (R. 204-5); and then found against Aro. The Court of Appeals was also presented with this factual issue (R. 645); considered "the fair and reasonable intention of the parties" (R. 654); and then also found against Aro, stating that replacing the fabric "would be counted" a major reconstruction of the top assembly (R. 655). Thus, the record, and concurrent findings below, negate the presence of any implied license to replace, arising out of intention of the vendor or of anyone else.

D. The Top Fabric Is Not "Perishable"; Is Not "Frequently Replaced"; and Is Not "Worn Out" When Replaced

Aro's brief, page 49, relies on Judge Rich's statement (1949 Hearings 20) that:

> "There is another old doctrine of contributory infringement law under the Morgan Envelope

> case which has always permitted the replacement of parts which are expected to be worn out or consumed in use. * * *"

This statement, however, makes reference only to parts which the machine *consumes* or *operates upon* rather than something which is the heart of the invention. This Court recognized the distinction in *Leeds and Catlin* v. *Victor Talking Machine Co.*, 213 U.S. 325:

> "To confound its [the disc's] active co-operation with the mere passivity of the paper described in the Morgan Envelope Company is not only to confound essential distinctions made by the patent laws, but essential distinctions between entirely different things."

The Court of Appeals below distinguished cases such as *Morgan Envelope* v. *Albany Paper Co.*, 152 U.S. 425 (R. 651, fn. 2).

The Court of Appeals expressly found that the part here involved is *not* one "which expectably would wear out after a short period of use" (R. 655). Replacement ordinarily does not occur, if at all, until after a period of *years*, (R. 655) wherefore the "life" of the part here involved is of an entirely different order of magnitude from anything contemplated in prior cases (e.g. cases involving a hypodermic needle or razor blade, having a utility life of days or months at most).

A top fabric, if cared for, lasts "four or five years" even from an appearance point of view (R. 205), and "many years" (R. 33, 655) from a utility point of view. And these figures relate to cloth fabrics, stitched together, whereas modern technology, using vinyl fabrics has increased the life of tops even further, as stated by Petitioner Harold Shapiro (R. 231):

> "Today with the heat sealing and actually fusing the plastic together at the seams, I think convertible tops *will last much, much longer* than they did before."

It is clear, therefore, that with proper care a top fabric has a life of such long duration that an individual car owner may *never* replace the top fabric before disposing of his car.

The Courts below found that replacements were not so "frequent" as to indicate that entire top replacement was intended to be permissive repair, i.e. the District Court considered, *inter alia*, the test of "frequency of replacement" (R. 39), while the Court of Appeals compared "the expectable life span of the fabric" with "the expectable life span of the other components of the convertible top and of the car itself" (R. 655). Moreover, the Courts found that replacements made even after a three-year period (R. 33, 655), are not made because the fabric is "worn out"; but because of considerations of "appearance" (fn. 10, R. 41).

In speaking of a three-year "life" of the top, we are speaking of *style* life. Replacement after a three-year period takes place, not because the original top is worn out, but rather to get a "new look"; and as stated by Petitioner Harold Shapiro, the replacement top may be more up-to-date than the original, i.e. "very similar to the one we are using today" (R. 125-6). Petitioner George Shapiro has, moreover, admitted that, at the time of replacement, the original top may functionally be "in perfectly good condition" (R. 98).[10]

[10] The Government suggests that replacement is effected "to preserve the continued utility of the device purchased" (U.S. Br. p. 3); and that, at the time of replacement, the top fabric is "unusable" (U.S. Br. p. 4) and "worn-out" (U.S. Br. pp. 8 and 11). The record is, however, to the contrary.

Clearly, therefore, Aro's "replacement" tops were not sold to merely "repair" or restore the car to its original condition; and most certainly were not sold to replace a "worn out" part insofar as utility is concerned.

Moreover, while the top fabric has been characterized as having a shorter "life" than the remainder of the car, such characterization results from an attempted equating of two different things, i.e. top "style life" to automobile "utility life." A convertible automobile is obviously "out of style" after three or more years; and the "style life" of the car is accordingly substantially *the same* as the "style life" of the top. Similarly the "utility life" of the top approaches the "utility life" of the car.

The top fabric comprising the heart of the invention is, therefore, hardly "perishable." Its shortest life, by any standard, is a period of *years;* is longer in duration than that of some metal top parts associated with the fabric (see R. 641); has an ever increasing life with modern technology; and in fact has a life duration substantially the same as the "life" of the overall car, provided consistent standards of style life and utility life be applied to both the car and top fabric.

E. Top Fabric Replacement Is a Time-Consuming, Expensive and Difficult Procedure

When a top fabric of the special type here involved becomes damaged or faded, it is by no means necessary to replace the entire fabric; and much simpler and less expensive "repair" procedures are well known to Aro, to car owners, and to trimmers (R. 390, et seq.). To replace the entire top, the entire heart of the invention, is a procedure involving expenses and difficulties of an entirely different order of magnitude.

The special top fabrics here involved are not secured to the car in an easily removable manner. As described in the Mackie-Duluk patent, the "top fabric or material 20 is *permanently* fastened by rivets 21 to the rain trough 22." (R. 593). In commercial cars using a Mackie-Duluk shaped fabric, the fabric is "fastened to the trough, fastened on the rear, fastened to the pillar, and so forth" (R. 53). To replace an entire top fabric one must, due to the difficulty and time-consuming nature of a replacement procedure, normally go to a trim specialist; and replacements by the "do-it-yourself" man are negligible (R. 108).

In replacing the entire original top, moreover, the car owner is completely replacing a large and prominent structure and is faced with a major item of expense. The Trial Court found that the cost "of even the cheapest fabric" is more than 20 times that of the metal wiping arm and trough associated therewith (R. 38-9). A car owner, considering an entire top replacement, thus knows full well that he is undertaking something far more than a simple repair, and the Court of Appeals so found (R. 655).

F. Aro Failed to Carry Its Burden of Proving That There Is an Implied Right to Replace the Fabric Under the Ford and General Motors Agreements

The Trial Court expressly found that Aro was *not* protected "by virtue of certain releases or licenses given General Motors and Ford" (R. 33, fn. 1).

Aro's plea of implied license was one of affirmative defense on which Aro had the burden of proof. Aro claimed an implied license to repair worn out fabrics, but, in order to carry its burden on this question, Aro was required to show that its tops were used *only* in

those situations wherein repair is permissible; see Judge (later Chief Justice) Taft's decision in *Thomson-Houston Electric Co.* v. *Ohio Brass Co.*, CA-6, 80 F. 2d 712, 722-3; Amdur, *Patent Law and Practice*, 1935, page 687; *National M. Casting Co.* v. *American Steel Foundries*, 182 Fed. 626, 641 (C.C.D. N.J.); and *Connecticut Telephone & Electric Co.* v. *Automotive E. Co.* (D.C. N.J.), 14 F. 2d 957, 963, aff. 19 F. 2d 990, cert. den. 275 U.S. 564. This long-established rule is well stated in *Automotive Parts Co.* v. *Wisconsin Axle Co.*, CA-6, 81 F. 2d 125, 127-8:

> "* * * Ordinarily the burden rests upon the plaintiff to show patent infringement, but in circumstances such as are here disclosed, where there is an admission of sales without reservation as to the number sold for a single axle, *or the condition of the original parts* in any such axle, it would seem *only fair that the seller should assume the burden* of showing that its acts were not infringements. It would be difficult for the appellee to ascertain the facts necessary for the determination of that question. The appellant ought to have records of its sales and customers from which *the purpose for which the parts were bought* could be ascertained, *that is, whether for the purpose of repairs or for reconstruction* within the meaning of those terms as we have herein defined them." (Emphasis added.)

While Aro argues that it should be permitted to replace "worn-out" fabrics, Aro expressly admitted that it does not limit the use of its tops to such situations or, indeed, to any situation which might be considered permissible repair. Thus, Defendant George Shapiro testified (R. 97-8):

> "XQ. [By Mr. Wolf] * * * When Aro Top Sales deals or sells a kit for any top to any purchaser

do they or do they not have knowledge as to the reason for the purchase? A. No.
XQ. *Do you concern yourselves in Aro Top Sales with the reasons for particular purchases?* A. No.
XQ. * * * can you tell me whether or not you know generally *the conditions of the tops?* A. We don't know the purposes why they buy the tops.
XQ. * * * *The condition of the original tops?*[11]
A. No. * * * not unless we install it. Then again, most of us *don't even check anyway.*" (Emphasis added.)

The record shows that Aro's replacement top fabrics are purchased for a variety of reasons. They are purchased by used car dealers to spruce up a car for purposes of resale (R. 96). They are utilized when a car is "damaged in transit" (R. 97), and doubtless also after an accident wherein the entire top structure may be so thoroughly damaged that all the pillars, bows, etc. must be replaced along with the fabric, in which event there is, of course, reconstruction even under Aro's and the Government's view of the case. Aro admits that its tops are often utilized when the fabric is not truly "worn out",[12] and, to the contrary, is functionally in "perfectly good condition" (R. 98).

Clearly, therefore, Aro failed to prove that its tops are used solely for the uses which it calls permissive repair; and Aro thereby failed to carry its burden on the question of implied license.

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[11] Cf. the *Automotive Parts* quotation above, i.e. "the condition of the original parts."

[12] See *Miller-Hatcheries* v. *Buckeye*, CA-8, 241 F. 2d 619:

"He may not, however, under the guise or pretext of repairs, * * * replace parts or elements which are not worn out * * *."

See also *Automotive Equipment Co.* v. *Connecticut Telephone & Electric Co.*, CA-3, 19 F. 2d 990; cert. den. 275 U.S. 564; and see 69 C.J.S. § 287.

III. THE RULING BELOW WAS IN FULL ACCORD WITH PRIOR DECISIONS OF THIS COURT, AND, WITH STANDARDS WHICH CONGRESS REENACTED IN 1952

A. The History of This Litigation, and the Physical Exhibits and Demonstrations Adduced By the Parties Below, Are of Considerable Importance to a Full Understanding of the Case

Aro's counsel, still representing Aro herein, upon first examining the Mackie-Duluk patent "thought that there possibly might be some infringement" (R. 224); and Aro accordingly sought a license under the patent provided Aro could be assured that infringers "would be vigorously prosecuted for infringement unless they also became licensees on the same basis." (R. 474). At that time, Aro considered that licensing of, and litigation involving, the special top fabrics here involved was entirely proper.

Aro subsequently withdrew its request for a license (R. 475), not because Aro believed it was engaged in any legitimate repair operation, but because of certain changes in the top fabric which Aro made, on the advice of counsel, to avoid the patent claims (R. 39). The changes themselves evidenced lack of any "legitimate repair" considerations, for if such did characterize Aro's operation *there would have been no need to change the fabric to another thought to be non-infringing.* The Trial Court ultimately found that Aro's changes did not avoid infringement; and that the changed structure was "no simpler or cheaper, affected no possible improvement * * * [and] would never have been adopted by defendants except as an attempt to avoid infringement" (R. 39, fn. 8). In short, the entire controversy between the parties herein arose and persisted because of advice of counsel, later found to be faulty, regarding the significance of a fabric change.

The record includes extensive discovery proceedings, comprising some eight depositions, several hundred interrogatories and requests for admission, and fact stipulations. The two-week trial further included extensive testimony by expert and fact witnesses on both sides. In addition, numerous physical exhibits, constituting both original and replacement top fabrics were submitted to the Trial Judge for examination.[13] Demonstrations involving Aro's tops, installed on two different automobiles, were conducted by the expert witnesses (R. 183 et seq., 206 et seq.). The Trial Judge took an active part in these demonstrations; closely examined, measured, and questioned witnesses regarding the structures demonstrated (R. 207, 209); and based his findings in part "on my own observation at the test demonstrations" (R. 41, fn. 10).

In considering whether Aro had infringed and contributorily infringed, the Courts below were concerned with a purely factual issue, *Stiltz* v. *United States*, 269 U.S. 144. In actually finding infringement, the Courts below resolved a most complex factual situation, characterized even now by widely divergent views of the facts, i.e. the Court of Appeals was required to resolve a "*hotly contested* issue of infringement" (R. 648). The Court of Appeals, in evaluating the contentions of the parties, was benefited by physical exhibits (R. 645-6); and Aro has admitted that, absent such exhibits, a true appreciation of the factual circumstances is most difficult since, as Petitioner Harold Shapiro has stated (R. 630):

> "I can't go into detail because there are too many bolts and nuts to talk about."

[13] Pl's exhibits 11A-11E, inclusive; Def. exhibits N, N-1, O, P, Q, R, S, T, U, V. These and other physical exhibits were also presented in physical form to the Court of Appeals (R. 645-6).

The Trial Judge was, moreover, called upon to judge the credibility and qualification of witnesses; and did so in arriving at his findings (R. 36, 46-7).

In view of this history, the findings below should be accorded great weight. As stated by this Court in *Graver Tank & Mfg. Co.* v. *Linde Air Products Co.*, 336 U.S. 271, 274-5:

> "Rule 52(a) of the Federal Rules of Civil Procedure, 28 U.S.C.A., provides in part: 'Findings of fact shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge of credibility of the witnesses.' To no type of case is this last clause more appropriately applicable than to the one before us, where the evidence is largely the testimony of experts as to which a trial court may be enlightened by scientific demonstrations. * * *
>
> "The rule requires that an appellate court make allowance for the advantages possessed by the trial court in appraising the significance of conflicting testimony and reverse only 'clearly erroneous' findings. * * * A court of law, such as this Court is, rather than a court for correction of errors in fact finding, cannot undertake to review concurrent findings of fact by two courts below in the absence of a very obvious and exceptional showing of error."

B. The Decisions Below Are Factual and Conform to Established Legal Principles

The statute dealing with direct infringement states (35 U.S.C. § 271a):

> "* * * whoever *without authority* makes, uses or sells any patented invention * * * infringes the patent." (Emphasis added.)

When the car owner's fabric was entirely replaced with one of Aro's Mackie-Duluk type fabrics, there was a "making"; and when the car owner subsequently used the car there was a "use" and hence a direct infringement, unless the car owner had "authority" (implied license) to do so. The essential holdings of the courts below were that, on the basis of all the facts and circumstances of record, including the Courts' inspection of physical exhibits and demonstrations, Aro's operations could not be considered permissive repair. In essence, the courts found that there was no license, express or implied, which authorized Aro, or a car owner, to replace an *entire* original fabric with one of Aro's distinctive Mackie-Duluk shaped fabrics.

The Government concedes that 35 U.S.C. § 271(a) is "declaratory" of prior law, and "*left intact the entire body of case law on direct infringement*" (U.S. Br. p. 8). Since an act of reconstruction *is* an act of direct infringement, let us examine what this body of case law, "left intact," specifies.

In *Heyer* v. *Duplicator Mfg. Co.*, 263 U.S. 100, this Court considered whether replacement of a particular part of a patented combination was reconstruction, or permissive repair. In evaluating this question, this Court considered many factors, including the *cost* of the part replaced, its *life*, and its *importance* to the inventive concept. On this latter point, for example, the Court said that the gelatine bands were "less distinctive to the machine" than the cutter knives of *Wilson* v. *Simpson*, 9 How. 109. Under the facts of the Heyer case, this Court found for permissive repair; but stated, in so deciding, that the controlling criterion was "common sense applied to the specific facts."

In *Cotton-Tie* v. *Simmons*, 106 U.S. 89, this Court found replacement of a *single* part in a patented combination to be an act of reconstruction, and direct infringement:

> "The band * * * is *an element* of the third claim of the Brodie reissue. That claim is for *a combination* * * *. Whatever rights the defendants could acquire to the use of the old buckle, they acquired no right to combine it with a substantially new band, to make a cotton-bale tie. * * * As a tie the defendants *reconstructed* it, although they used the old buckle without repairing that." (Emphasis added.)

And in *Leeds & Catlin* v. *Victor Talking Machine*, 213 U.S. 325, this Court further held:

> "It will be observed how important the record is to the invention embodied in the claims * * *. It is the disc that serves to distinguish the invention—to mark the advance upon the prior art * * *." (p. 330)
>
> * * * *
>
> "* * * It would seem that, on principle, when deterioration of an *element* has reached the point of unfitness, there is a destruction of the *combination and a renewal of the element is a reconstruction of the combination*. And it would also seem on principle that there could be no license implied from the difference in the durability of the elements or periodicity in their use * * *." (p. 333)

In enacting 35 U.S.C. § 271(a), the Congress left all of the foregoing decisions of this Court "intact," and reenacted the principles of substantive patent law specified therein.

Moreover, inasmuch as substantially every circuit has so stated, it is clear that Congress, in enacting the

"declaratory" provisions of § 271(a), reaffirmed that (a) reconstruction is direct infringement; (b) that replacement of a single part can, in appropriate circumstances, be "reconstruction"; (c) that there *can* be a "heart" of a combination, replacement of which may constitute reconstruction rather than mere repair; and (d) that, in deciding between repair and reconstruction, common sense and sound judgment applied to all the facts of a given case constitutes the only workable test."

Thus, in *Davis Electrical Works* v. *Edison Electric Light Co.*, CA-1, 60 Fed. 276, the First Circuit was faced with a question of repair or reconstruction. The invention related to an improved filament for lamp bulbs, claimed for completeness in combination with a glass envelope, and electrical connectors. The filament "burned-out" after a period of use; and had a "life" shorter than the other components of the combination. The Court, upon consideration of all the facts, found that replacement of the filament was *reconstruction* since this new filament was "in essence * * * the light giving thing," just as the special Mackie-Duluk fabric is, in essence, the thing which achieved the advantages of Mackie-Duluk. The Court, in the *Davis* case, stated that use of the original envelope with the new filament was not controlling since "the glass receiver was old and common," just as the Trial Court in the instant case noted (R. 38):

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[11] The true nature of a "repair" has been commented upon by courts adjudicating cases in other fields. See *Campbell* v. *Brown*, 245 F. 2d 662, 666 (CA-5, 1957); and *Masao Hirasuna* v. *McKenney*, 245 F. 2d 98, 101, 102 (CA-9 1957). Any broad definition of "repair" in the instant case, without regard to the specific facts discussed herein, may have effects reaching far beyond those contemplated by Aro and the Government.

"However, the bows are standard, and not part of the invention. I disregard them, and also, of course, the car body itself."

The rationale of *Davis* warrants full quotation:

"We need to be careful not to be deceived by the form of things. In the planing machine every part might be renewed in succession, or every joint might be temporarily taken apart, and every element laid in disorder, without necessarily involving reconstruction. *On the other hand, in certain stages of use the essence of a device, though in appearance only a small portion of it, may be lost, and its renewal amount to reconstruction.* Whether the result is this or reparation depends less on the determination of rules of law * * * than on the direct apprehensions of questions of fact by the sound mind, trained in the common experience of mankind, and guided by the evidence laid before it. The conclusions which for the major part satisfy that apprehension must be accepted, although they may be very far from infallibility. In the absence of a crucial test to which all must yield, the only aid comes *from various minor or incidental considerations, and their combined effect.*

"We are dealing in this case, not with a lamp, nor even a so-called electric lamp, but with the particular so-called electric lamp covered by the claim in question here. In determining between reparation and reconstruction we must deal with *the essence* of that, and that only. It may be that for many patented combinations each element is, for some purposes, of equal value * * *; *but this rule is limited mainly to the question of the construction to be put by the court on the patent,* when that is in doubt. It cannot control the apprehension of courts or juries, when seeking out the substance of things, with reference to the particular determination whether what is in form reconstruction is in truth reparation, or vice versa. The

> latter question is, as already said, one largely *of fact*, appropriate in suits at law *for a jury*, under proper instructions from the court * * *." (Emphasis added.)

The Second Circuit, in *Morrin* v. *Robert White Engineering*, CA-2, 143 Fed. 519, was also concerned with a combination patent, wherein certain novel steam generating tubes were claimed in combination with conventional, longer-lived parts of a boiler "to describe the invention intelligently." The Court noted that the new generating tubes constituted "the vital element of the combination", and rendered the combination patentable; and that, in replacing the novel tubes, defendant "was not merely making repairs, but was, in fact, furnishing a new boiler essentially *reconstructed* in all of its novel features." The Court further noted, at p. 520:

> "Whether the bounds of legitimate repair have been exceeded must be determined upon the facts of each case as it is presented."

The Third Circuit, in *Hess-Bright Mfg. Co.* v. *Bearings Co.*, 271 Fed. 350, 353 (DC-Pa.) stated:

> "What is one and what the other [i.e. repair or reconstruction] the facts of each case must determine. The line, as before observed, is most difficult to draw in words of description; it is by no means so difficult to draw in fact."

The Fifth Circuit, in *Hughes Tool Co.* v. *Owen*, CA-5, 123 F. 2d 950, 952, recognized that:

> "* * * there is a debatable ground, the precise limits of which cannot be determined in advance, but must be determined on the facts of each case, between the bounds of legitimate repair and infringing reconstruction."

The Sixth Circuit, in *Automotive Parts Co.* v. *Wisconsin Axle Co.*, CA-6, 81 F. 2d 125, 127 stated:

> "* * * *Every case, as we have said, must be decided on its special facts and circumstances* For example, there might be a structure where the putting in of a certain number of new parts would be 'reconstruction,' whereas the putting in of a smaller number would be 'repair,' *or even where the putting in of one new part would be reconstruction* but the putting in of two or three would not be, depending in each case upon whether, after the replacement, the structure as a whole could reasonably be said to be a new structure or the old one. The difficulties that are sometimes encountered in arriving at a correct conclusion in such cases do not arise from any vagueness or uncertainty in the rule or test to be applied, but from the necessity of determining which of the two classes of parts, those supplied or the remaining original parts, *dominates the structure as a whole.*"[15] (Emphasis added.)

The Eighth Circuit, in *Miller Hatcheries* v. *Buckeye Incubator Co.*, CA-8, 41 F. 2d 619, was of the same view and, at p. 622, quoted with approval *Goodyear Shoe Mach. Co.* v. *Jackson*, 112 Fed. 146, 150, also quoted by the Court of Appeals below (R. 654).

And the Tenth Circuit, in *Williams* v. *Hughes Tool Co.*, 186 F. 2d 278, 283-4, certiorari denied, 341 U.S. 903, held:

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[15] The District Court found that even under the test of the case, there was a reconstruction. (R. 39):

> "Whether the test be that of substantial reconstruction, *domination of the part replaced*, or frequency of replacement I find that replacing the fabric is not permissive repair (Emphasis added.)

The Court of Appeals agreed (R. 655).

"* * * In these respects, we think the instant case is analogous to the case of Davis Electrical Works v. Edison Electric Light Co., 1 Cir., 60 F. 276, 278, 282, where a *combination patent* for an electric lamp was involved. * * *

"The court held that the replacement of an attenuated carbon filament, *one element in the combination,* was reconstruction and not permissible repair, *because all of the elements other than the filament were old, and the filament and its use in the relation described was the new element in the combination and produced the improved results.*

"The instant case is also analogous to Morrin v. Robert White Engineering Works, 2 Cir., 143 F. 519, * * * tubes of specified form and *shape* constituted the *vital element of the combination.* * * * The Court held that the replacement of sets of tubes in the patented device was not permissible repair, but was, in fact, furnishing a new boiler *essentially reconstructed in all of its novel features,* and constituted infringement.

"Williams, by his process of retipping, undertakes to restore *worn-out* teeth * * * [and] thus reconstructs and replaces that element of each patent *wherein lies the novel features of the combination.* We hold that so doing is not permissible repair, but reconstruction, constituting infringement." (Emphasis added.)

C. The Ruling Below Was Based on Many Factors Not Mentioned by the Government

In commenting on the decision below, the Government (U.S. Br. p. 2) mentions what it believed to be "the ground" upon which the Court of Appeals based its decision. The decision, however, on its face, reveals that the Government's analysis of the decision is rather oversimplified.

The Court of Appeals noted that the "basic question" argued before it related solely to the issues of repair and reconstruction, and contributory infringement under 35 U.S.C. § 271(c) (R. 648-9). In deciding this "basic question," the Court of Appeals considered "all the facts and circumstances presented" (R. 654, line 18); including some fifteen factual considerations argued by the parties on appeal (see e.g. some facts argued by Aro, R. 645, R. 639-40); and quoted from one of its own prior cases which, said the Court, "neatly and succinctly" presented certain factors which it considered (R. 654).

Thus, the Court of Appeals noted, *inter alia*, the following factors:

(a) The Court stated "In addressing ourselves to this [basic] question we turn first to the patent in suit and its prior art." (R. 649). The Court thus considered some or all of the fifty patents and publications, foreign and domestic, made of record by Aro; and thereby saw that *the patentee's contribution to the art, the heart of the invention, was the new fabric shape and fastening, which is the exact thing that Aro removes and replaces.* The history of the art, of course, also gave the Court a clear appreciation of the problems involved and the understandings of persons in this business.

(b) The Court further considered "whether the shape of the patentees' fabric constituted 'a material part of the invention' [in accordance with 35 U.S.C. § 271(c)]" (R. 652); found that it *was* (R. 654); and further noted that the fabric shape had "patentable novelty" (R. 651).

(c) The Court also considered "the fair and reasonable intention of the parties" (R. 654, lines 21-2).

In this respect, as already discussed, those parts of a car which in the view of the manufacturer, need frequent replacement are attached in an easily removable way; but the special fabric, the heart of the invention here involved, is *permanently* attached (R. 86, 192), and the patent so states: "The top fabric or material is permanently fastened by rivets 21 to the rain trough." (R. 593, col. 2, line 47). Moreover, as further discussed, it is a very difficult and time consuming job to apply a new top constituting the heart of the Mackie-Duluk invention, whereas the car will easily and quickly receive a non-infringing top in event replacement is desired, and the District Judge so held (fn. 8, R. 39):

> "Defendants admitted that is even cheaper, and easier installation, to replace with the outside-snap type than with a new Mackie-Duluk. However, this is not what defendants do."

Replacement of an entire top fabric of the type here involved is *not* normally considered a "repair" by car manufacturers or owners; and the Court specifically found that such entire top replacement "would be counted a major reconstruction of the top assembly," rather than a mere repair thereof (R. 655).

(d) The Court of Appeals further considered "the scope, nature and purpose of the patented invention" (R. 654, line 20), as well as "the specification and claims of the patent" (R. 654, line 23); and noted that the claims, while cast in combination form, recited mere background elements in conjunction with a unique fabric top "of a particular form or shape" (R. 651) i.e. the unique fabric represented the heart and inventive novelty of the combination.

e) The Court further considered "the condition of decay or destruction of the patented device or machine" (R. 654, line 24). As already discussed, Aro admitted that at the time of replacement the original top could functionally be "in perfectly good condition" (R. 98). Top replacements are *not* ordinarily effected because the original top is non-functional or "worn-out", but are made "because of convertible owner's interest in appearance" (R. 41, fn. 10). In looking into this question, the Court of Appeals was aided by physical exhibits constituting actual top fabrics taken from various automobiles, and submitted to the Court of Appeals for examination (R. 645-6, 232 *et seq.*).

f) The Court also inquired into the various factual criteria spelled out in 35 U.S.C. § 271(c); and expressly found that, under the facts and circumstances of this case, every one of these criteria was met by Aro's sale of their special fabrics, embodying the heart of the invention (R. 654-5).

g) The Court, in addition, considered those factors mentioned by the Government (U. S. Br. p. 2), *i.e.* the "life of the fabric" and the cost of a replacement procedure (R. 655).

h) In addition, the Court specifically noted and agreed with the District Court's "finding of infringement" (R. 655); and thereby considered the "domination of the part replaced" and the "frequency of replacement" (R. 39), as well as *changes* to the car and fabric made by Aro in the course of their so-called "replacement" (R. 39 *et seq.*). In this respect, it should be recalled that Aro's "replacement" tops, when installed, produced a "new article" of such uniqueness that it could be distinguished from original

tops, and the replacement tops of others, "two streets away" (R. 631).

It was on the basis of *all* the foregoing, and much other material, presented to the Court of Appeals, that the Court then decided the instant case "on its own facts, pretty much as an individual instance." (R. 654). The instant case turns on a very special, highly complex factual situation; and the Court of Appeals decided the case on the basis of "all the facts and circumstances presented," not just those few factors recited in the Government's brief.

D. The Government's New "Test" Is Contrary to the Case Law "Left Intact" By 35 U.S.C. § 271(a)

In presenting a new test for determining questions of repair and reconstruction, the Government states that, for reconstruction to occur, there must be "a second creation of the patented *entity*"; and, by way of clarifying this premise, that "Mere replacement of individual unpatented parts one at a time, whether of the same part repeatedly or different parts successively, is no more than the lawful right of the owner to repair his property." (U.S. Br. p. 15)

The Government's test, as thus stated, can be characterized as the "last nut and bolt" test; for no matter what parts are replaced, no matter what the circumstances of replacement, no matter what the intentions of the parties, reconstruction should never be considered to occur, says the Government, *unless every single part of the combination, down to the last nut and bolt, is replaced simultaneously.* Frequency of replacement, and its expense, should be disregarded, says the Government (U.S. Br. p. 4); as should be the fact that "the fabric's particular shape was the

advance in the art which brought the combination up to the inventive level," and considerations regarding the durability of the part, difficulties in its replacement, and the standard or background nature of parts not replaced (U.S. Br. pp. 13-14).

This "test" finds no support in the body of law "left intact" in "declaratory" § 271(a) (*cf.* U.S. Br. p. 8), and would require reversal of every case cited above which found for reconstruction, including decisions of this Court. Interestingly enough, in *Williams* v. *Hughes Tool Co.*, 186 F. 2d 278 (C.A. 10), certiorari denied, 341 U.S. 903, the Government also filed a Memorandum *Amicus Curiae*, and conceded (U.S. Memo., No. 561 Oct. T. 1950, p. 6) that:

> "* * * whether a particular repair on a particular patented combination is *of such major character* as to constitute a reconstruction of the combination would not, ordinarily, it may be assumed, be regarded as a question warranting review by this Court." (Emphasis added)

At that time, therefore, the Government was clearly of the view that the question of reconstruction was entirely factual, and that reconstruction could well occur without replacement of every part. It is submitted that nothing has occurred in the ten years since *Williams* to warrant adoption of the Government's new view; and that, quite to the contrary, the enactment of the Patent Act during that time interval showed a clear intent on the part of Congress to adopt the tests of the case law then in existence.

Nor is the Government's test even necessary to clarify the understanding of the courts; for, as stated in the *Automotive Parts* case, 81 F. 2d 125, 127, *supra*:

"The difficulties that are sometimes encountered in arriving at a correct conclusion in such case *do not arise from any vagueness or uncertainty in the rule or test to be applied*, but from the necessity of determining which of the two classes of parts, those supplied or the original remaining parts, dominates the structure as a whole." (Emphasis added.)

The Courts below, in considering the entire record, and in giving attention to all the facts and circumstances adduced therein, was therefore applying the only test of any practical use in this complex factual area.[16] Just as this Court, in *Graver Tank* v *Linde Air Products*, 339 U.S. 605, 609, stated that another factual question in the patent law, equivalency, "must be determined against the context of the patent, the prior art, and the particular circumstances of the case," and that that factual issue "in the patent law, is not a prisoner of a formula and is not an absolute to be considered in a vacuum," so also should the equally complex factual issue of reconstruction be decided when it arises.

[16] This Court, in *C.I.R.* v. *Duberstein*, 363 U.S. 278, recently had occasion to reject a broad test suggested by the Government in another field; and held that the test was not applicable since the question there involved required factual determination on a case by case basis. Much the same situation is involved in the instant case since no two combination patents can involve the same combination, wherefore any two courts, considering any two different combination patents, must necessarily be concerned with entirely different factual circumstances.

E. The Congress, in Enacting 35 U.S.C. § 271, Recognized That Evaluation of All the Facts in an Individual Case Represented the Only Workable "Test"

In considering the provisions of H.R. 3760, 82nd Cong., First Sess., (1951) Congress investigated the effect of the proposed statute on manufacturers of replacement parts. The 1951 Hearings, p. 153, includes the following:

> "Mr. Crumpacker: We have received protests from manufacturers of replacement parts for such things as automobiles, farm tractors and the like who evidently feel that the language used in this H.R. 3760 would make them contributory infringers of patents on the original article, the tractor or something of that sort.
>
> * * * *
>
> "Mr. Rich. Those were the most vociferous objectors to the old bills on the subject. *Whether or not they would be liable would depend on the facts in each particular case* * * *." (Emphasis added.)

It is significant that Aro, in quoting this same section of testimony at their brief p. 50, omitted the testimony emphasized above. Indeed, at Hearings p. 156, *ibid.* Judge Rich stressed the foregoing in stating:

> "But you have to go into the facts, and the court has to go into the facts * * *".;

and in again stating, p. 157, *ibid.*:

> "Well, in each case you would have to look at the details * * *."

Other witnesses testified to similar effect. Thus, Mr. Neave stated at p. 112, *ibid.*:

> "Mr. Rogers: It is not so much as to which way it may go as to how far a man must act before he

becomes a contributor to an infringement.

"Mr. Neave: That is always a matter depending upon the facts themselves."

Even the witness McCabe, who strongly opposed the bill, testified at p. 144, *ibid.*, regarding the suitability of a part for substantial non-infringing use, as follows:

> "Here is a case it seems to me where we have to leave it to the discretion of the court that can judge the infringer or the contributing infringer from the facts, and can handle them."

Indeed, the Justice Department stated at p. 53 of the 1949 Hearings (H.R. 3866, 81st Cong., 1st Sess.):

> "Whether an article is a 'staple article' of commerce, whether it is 'especially made' for use in a patented invention, whether it is 'adapted' for such use [i.e., as the statute states, 'adapted for use in an infringement of such patent'], whether it is 'suitable for actual commercial non-infringing use' *are questions of fact and matters of subjective judgment* upon which there is little likelihood of unanimity.
>
> "Nor is a decision in one case likely to be of much help in another case * * *."

Congress was thus well aware of the importance of factual determinations; and in enacting Title 35 U.S.C., approved the factual tests which had prevailed over the years, the very tests employed by the Courts below in the instant case.

F. The Government's Test Is Not Supported By Wilson v. Simpson, and Is in Fact Contradicted Thereby

The Government, in presenting its new "far more direct" test of reconstruction (U.S. Br. p. 15), suggests that its test is based upon *Wilson* v. *Simpson*, 9

How. 109 (U.S. Br. pp. 10-11). The actual test suggested by the Government, however, is inconsistent with the holding of that case.

The Court of Appeals below, at R. 652-3, quoted from *Wilson* v. *Simpson*, and noted that, in its view, "the rule stated and applied in *Wilson* v. *Simpson* * * * is still the rule" (R. 652). In the section quoted by the Court of Appeals, this Court noted that certain cutter knives there in question required very frequent replacement; and that absent such replacement, said this Court, "his machine *would have been useless to him*, except for sixty or ninety days after a machine had been put in use." The situation in the instant case is clearly otherwise. Neither the car nor its top is "useless" at the time of replacement.

This Court further noted that the right to replace the cutter knives in *Wilson* v. *Simpson* was *"not because they are of perishable materials"*; but because

> "the inventor of the machine *has so arranged them as part of its combination*, that the machine could not be continued in use without a succession of knives at *short intervals.*" (Emphasis added.)

This is not true in the present case. The convertible cars here involved are themselves entirely conventional, and are *not* "so arranged" that the top fabric thereon must be replaced with the particular fabric shape here involved, much less at "short intervals." Indeed, the car is so arranged that any of various different tops may be placed thereon without any change to the car, and without detracting from car utility; and one of these possible forms of tops, non-infringing in character, is far easier and cheaper to place on the car than the infringing structure here involved. Moreover, both Courts below found that

"frequent" replacement is *not* required (R. 39, 655), *e.g.* the Trial Court considered, *inter alia*, the test of "frequency of replacement."

This Court, in finding the cutter knives of *Wilson* v. *Simpson* to be permissively replaceable, stressed that they were "*meant* to be only *temporary* in use of the whole, and to be *frequently* replaced" and that "the purchaser uses [the machine] in a way the inventor *meant* it to be used." This factor of "intention," which appears to characterize the "rule" of *Wilson* v. *Simpson*, was stressed by this Court, in a subsequent decision, *Cotton-Tie* v. *Simmons*, 106 U.S. 89:

> "The principle of that case [Wilson v. Simpson] was that temporary parts wearing out in a machine might be replaced to preserve the machine, *in accordance with the intention of the vendor*, without amounting to a reconstruction of the machine." (Emphasis added.)[17]

Moreover, in *Wilson* v. *Simpson* this Court stated that, in appropriate circumstances (again depending primarily on intention), replacement of some parts, constituting less than every part of the combination, might well be reconstruction:

> "The other constituent parts of this invention, though liable to be worn out, are not made with reference to any use of them which will require them to be replaced. These, without having a definite duration, are contemplated by the inventor to last so long as the materials of which they are

[17] See also, *Withington-Cooley Mfg. Co.* v. *Kinney*, CA-6, 68 Fed. 500, 506 (Taft and Lurton, J.J.):

> "The duration and scope of a license must depend upon the nature of the invention and the circumstances out of which an implied license is presumed, and both must at last depend upon the intention of the parties."

> formed can hold together in use in such a combi nation. No replacement of them at intermediat intervals is meant or is necessary. They may b repaired as the use may require. With suc intentions, they are put into the structure. S it is understood by a purchaser, *and beyond th duration of them a purchaser of the machine ha not a longer use.*" (Emphasis added.)

Thus, while the Government would suggest that replacement of a single part should always be permissive repair, this Court itself has held to the contrary; and has expressly noted that permissive replaceability of a part must be determined from intention of the parties, a factor which the Government's test ignores.

The Courts below were fully aware of the real "rule" of *Wilson* v. *Simpson*, and applied that case correctly to the fact situation here involved. Aro urged that the Court of Appeals consider "the normal expectation of vendors of convertible automobiles" as well as "the normal expectation of purchasers of convertible automobiles." (R. 645). The Court of Appeals in turn stated that, *inter alia*, it was considering "the fair and reasonable intention of the parties" (R. 654); and the Court then found that replacement with the particular fabrics here involved "would be counted" a true and major reconstruction of the top assembly, rather than a mere repair thereof (R. 655).

In finding against Aro, therefore, it is clear that the Court of Appeals applied the very criteria which this Court has stated to be controlling. The decision below represented no more than an ultimate finding of fact, based on these criteria.

G. The Patent Act of 1952 Was Intended to Broaden and Strengthen the Patent System, and Reaffirmed the Doctrine of Reconstruction

At the hearings preceding enactment of the Patent Act of 1952 it was almost unanimously agreed that the patent system should be broadened and strengthened. Indeed, the principal witness from the Department of Justice said that "patents will play a large part in the expansion of industry incidental to the National Defense." The Department of Justice approved a number of broadening provisions of the proposed law, *but objected to eight others mainly on the ground that they would enlarge the patent monopoly. However, Congress passed all eight with only one very minor change.*[18] The Hearings cited in footnote 18 show that the Department of Justice was the only Government agency that objected to the sections here in issue, whereas they were unanimously approved by the agencies interested in research, including the Army, Navy and Air Force (pp. 150, 78), Commerce (pp. 101, 180), Agriculture (pp. 85-7), and the National Advisory Committee for Aeronautics (p. 84).

A review of the hearings shows that Congress almost invariably rejected proposals to narrow the law, and with equal consistency favored suggestions to broaden the law. In more recent years, Congress has gone even further. It has even given patentees special tax treatment for the express purpose of stimulating invention (S. Rep. No. 1622, p. 114, 83rd Cong. 2nd Sess., 1954).

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[18] See the hearings before the House Committee of the Judiciary on H.R. 3760 (Patent Law Codification and Revision) 82nd Congress, 1st Sess. (1951), pp. 91-98.

It is obvious, therefore, that Congress clearly intended that persons like Aro should not be free to reap profit, without payment of a reasonable royalty, by selling articles embodying the heart of the invention especially when, based on all the facts, there was a clear reconstruction under then existing law.

The question of infringement by the supplying of "replacement parts" was before Congress throughout its consideration of the bills here involved. See the Hearings on H.R. 3866 (1949), e.g. pp. 18, 26, 32, 53, 58-9, and especially 86-7 (wherein Congress was expressly advised of prior decisions on the issue of repair and reconstruction, including this Court's decisions in *Wilson* v. *Simpson*, 9 How. 109, and *Heyer* v. *Duplicator*, 263 U.S. 100); and see the Hearings on H.R. 3760 (1951), e.g. pp. 153, 155-6, and 206. Congress was fully aware of the doctrine of repair and reconstruction, and the possible liability of replacement part manufacturers; and in enacting § 271, clearly reaffirmed established law on the question of reconstruction, and showed that § 271 was to apply fully to replacement part manufacturers such as Aro.[19]

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[19] The established law on reconstruction was presented to Congress, for example by the Association of American Railroads which strongly opposed the bill but stated (1949 Hearings pp. 86-7):

> "It is a *long and well established doctrine* that the owner of a machine covered by a combination patent has the right to replace broken or worn parts, not separately patented, if such replacement constitutes repair or maintenance of the machine *and does not amount to a substantial reconstruction.*" (Emphasis added.)

The Association of American Railroads approved the existing law, but was concerned that the new statute might extend it. The Courts below, in finding that Aro reconstructed, did not hold that there was any extension of the law, and applied the law as stated by the Association of American Railroads, i.e. the Trial Court found Defendants liable even if "the test be that of *substantial reconstruction*" (R. 39, emphasis added).

Moreover, the legislative history shows that the Justice Department, in testifying before Congress, presented much the same arguments which it now presents to this Court. Thus, in the Hearings on H.R. 3866 (1949) Mr. Stedman urged that the bill not be passed since it would render "a supplier" of parts liable for contributory infringement (p. 52); and would render liable persons who sell an article specially adapted for use in a patented machine which the patentee "has sold" or "has licensed" (p. 53). Stedman further urged (as does the Justice Department here) that a patentee should be given no protection for a part claimed in combination with other parts, but should be protected only if the part is claimed per se (*ibid*, pp. 56, 58). Indeed, and *most importantly*, at pp. 58-9, Stedman went into this Court's decision in *Leeds & Catlin*, 213 U.S. 325 (on the issue of repair or reconstruction), and strongly urged that Congress *reject* the bill before it, since "the bill would inevitably restore [the doctrine of *Leeds & Catlin*]" (*ibid*, p. 59).

Congress *rejected* all of these arguments and thereby reaffirmed (or, as the Justice Department stated, "inevitably restored") the principles of patent law, and the doctrine of reconstruction, announced in *Leeds & Catlin*. It is submitted therefore that the Justice Department's present contentions correspond to those made unsuccessfully to Congress; and represent an effort to have this Court alter the patent law in a way that Congress was unwilling to alter it. Proper consideration for the legislative function requires that these contentions, renewed here, be rejected by this Court.

H. The Anti-Trust Cases Cited By Aro and the Government Are Not in Point; There Is No Misuse in the Instant Case

In *Carbice Corp.* v. *American Patents Development Corp.*, 283 U.S. 27, a patentee sought to monopolize the sale of a staple article of commerce—*dry ice*, by granting a license to use a patented transportation package for the dry ice only if the dry ice itself was purchased from the patentee. This case is clearly irrelevant, for as stated by this Court:

> "It [the patentee] may exact as the condition of the license a royalty or license fee. But it may not exact as a condition of a license that unpatented materials used in connection with the invention *shall be purchased only from the licensor****."
>
> * * * *
>
> "The case at bar is wholly unlike *Leeds & Catlin* v. *Victor Talking Machine Co.*, 213 U.S. 325, 333, on which plaintiffs rely. This was an ordinary case of contributory infringement. The Victor Company sold machines embodying a patent for a combination. Leeds & Catlin were held infringers because the intended incorporation in the Victor machines of the article which they sold, did not constitute a repair of the machine and hence was not within the license implied on sale." (Emphasis added.)

In *Motion Picture Patents Co.* v. *Universal Film Co.*, 243 U.S. 502, the situation was similar, in that the patentee sought to license its patented motion picture projector on condition that the licensee show only the patentee's films, thus creating a monopoly in films. No such private contract, restrictive notice, or requirement is even remotely involved in the instant case.

The Government apparently relies on *Motion Picture Patents*, for its discussion of public policy considera-

tions in the Clayton Act, 15 U.S.C. 14 (U.S. Br. pp. 9-10). However such considerations are not here involved, since the private agreement which characterized *Motion Picture Patents* is not present in this case. Moreover, it must be recalled that the Clayton Act is an enactment of Congress. The later enactment of 35 U.S.C. 271(d) expressly carves an exception to the Anti-Trust laws, and must prevail; particularly since, as the Government acknowledges, the questions involved in this case "are primarily ones of substantive patent law" (U.S. Br. p. 9).

It is submitted that the *Motion Picture Patents* case was concerned solely with the effect of a collateral agreement on the scope of the patent monopoly; but had no effect on the issue of repair and reconstruction. See *George Close Co.* v. *Ideal Wrapping Machine Co. et al*, CA-1, 29 F.2d 533, 534-5:

> "Undoubtedly, the Motion Picture decision *** narrowed the field of patent-infringement suits *** But this decision did not cut down the fair meaning and operation of the three words, 'make, use, and vend' in the patents statute. The changed view of the Supreme Court, as to the relation of collateral agreements to the scope of the patent monopoly, *involved no change in the law relative to reconstruction and repair. What was 'to make' within the meaning of the patent law before the Motion Picture decision, is 'to make' within the law since that decision.*" (Emphasis added.)

Nor do the decisions below in any way contravene *Mercoid Corp.* v. *Mid-Continent Investment Co.*, 320 U.S. 661. At p. 665, this Court noted that it deemed it improper for a patentee to use the patent "as the effective means of restraining competition with *its* sale of an unpatented article." The basic holding of

Mercoid was summarized by Mr. Justice Frankfurter (p. 676):

> "The Court holds in effect that the owner of a patent who exacts, as the condition of a license, that unpatented materials used in connection with the invention *shall be purchased only from the licensor* cannot obtain relief from equity against one who supplies such unpatented materials ***. In this view I concur." (Emphasis added.)

It is clear, however, that Mercoid does not apply in a different fact situation, *Transparent Wrap* v. *Stokes and Smith*, 329 U.S. 637. Indeed, in *Automatic Radio Mfg. Co.* v. *Hazeltine Corp.*, 339 U.S. 827, 831, this Court considered a situation wherein a patentee had a number of patents, and charged a royalty on everything that the licensee manufactured in the radio field whether covered by a patent or not. In holding this legal, this Court distinguished all of the "Tie-in" cases including *Mercoid*, as follows:

> "First, It is insisted that the license agreement cannot be enforced because it is a misuse of patents to require the licensee to pay royalties based on its sales even though none of the patents are used. *** Petitioner directs our attention to the 'Tie-in' cases. These cases have condemned schemes requiring the purchase of unpatented goods for use with patented apparatus or processes, prohibiting production or sale of competing goods, and conditioning the granting of a license under one patent upon the acceptance of another and different license.
>
> "Petitioner apparently concedes that *these cases do not, on their facts, control the instant situation. It is obvious that they do not. There is present here no requirement for the purchase of any goods.* Hazeltine does not even manufacture or sell goods ***."

The Report of the Attorney General's National Committee to Study the Anti-Trust Laws (1955), p. 239, expressly approved *Hazeltine*.

During the hearings on the new Patent Act the Department of Justice construed *Mercoid* as holding that "the doctrine of contributory infringement has been greatly narrowed if not completely abolished in all cases where the holder of a combination or process patent is also a *seller* of standard or unpatented material" (1951 Hearings, p. 208, emphasis added). Judge Rich agreed that the misuse doctrine did not apply to one who does not sell unpatented parts (p. 171). And at the hearings on the earlier bill (H.R. 3886; 1949) Mr. Stedman, speaking for the Anti-Trust Division, said (p. 77):

> "It is only when he attempts *to sell* a single unpatented unit that he gets into misuse." (Emphasis added.)

In the instant case, as in the *Hazeltine* case, respondent does not manufacture or sell any goods. Respondent has at no time sought to require, as a condition for license, that any article whatsoever be purchased from it or anyone else; nor has respondent ever attempted to use the patent to secure to itself or anyone else any competitive advantage in the sale of goods. Respondent has merely sought, unsuccessfully, to license Aro under the patent. Such actions have never been condemned by any court, certainly not by *Mercoid*. Indeed, *Mercoid* itself supports the decisions below, for absent misuse, that case itself holds that a contributory infringement is properly enjoinable, 320 U.S. at page 668.

In all the misuse cases cited, the patentee used his patent to compel *purchase of an unpatented article* from a source designated by him. Nothing of the kind has been done here. The car owners and trimmers are free to buy wherever they please. None has been told that a license will be refused unless he buys from the patentee or any other source. *There is no suggestion in the record that the sale of even a single top was diverted to or from Aro, or to or from anyone else, by reason of any conduct whatsoever of either respondent or anybody else.*

Respondent recognizes that top fabrics of various shapes can be installed on the cars here involved; and that Aro could sell various tops for these cars without any license, *i.e.* as the District Court found (R. 39, fn. 8):

> "In other words, the car owner, and defendants in his stead, did not have to subject themselves to replacement royalties if they did not want to."

Respondent has indeed recognized that Aro would be at no competitive disadvantage if they sold a top other than Mackie-Duluk; that no customer would be deprived of a top, and no car forced into disuse, if Aro chose not to take a license; and that indeed, there would be an *advantage* in Aro's selling another form of top due to the easier and cheaper installation which results. Aro's actual course of action, in these circumstances, reduces to a clear attempt, by the *national leader* in this field (Aro's Br. p.5), to show that patents can be ignored with impunity provided the company doing the ignoring is sufficiently large and powerful.

IV. THE "BASIC QUESTION" DECIDED BY THE COURT OF APPEALS IS THE ONLY QUESTION TO BE CONSIDERED HERE

A. The Real Issue Before This Court Does Not Encompass Several of the Questions Raised in the Petition

Four questions were presented to the Court of Appeals below by Aro (R. 642); and only one "basic question" was argued (R. 648). Aro's four questions were submitted pursuant to Rule 24(3)(b), Rules of the United States Court of Appeals for the First Circuit (1953), which requires a statement of questions by an appellant, and specifies:

> "Ordinarily no point will be considered which is not set forth in or necessarily suggested by the statement of questions involved."

Questions 1 and 2 of Aro's four questions related solely to the issues of repair vs. reconstruction (R. 642). Questions 3 and 4 on appeal below related solely to the issue of infringement and contributory infringement under 35 U.S.C. § 271 (1952). These four questions, *in toto*, were well summarized by the Court of Appeals in the "basic question" recited by that Court.

No question was submitted to the Court of Appeals regarding constitutionality of the Patent Act (cf. Pet. question 2);[20] nor was any specific question presented to the Court of Appeals regarding alleged misuse arising out of a territorial grant and/or out of cor-

[20] Aro's brief before this Court, pp. 2-3, presents four questions which are different in numeration, and sometimes in context, from those presented in its Petition. The changes are sometimes significant, e.g. Brief question 2 refers to a "release" never mentioned in the Petition questions. Respondent has concerned itself with the Petition questions in this brief in an effort to avoid confusion arising out of these question changes.

porate relationships (cf. Pet. question 4). It is accordingly submitted that issues raised here by Aro's questions 2 and 4 should be disregarded by this Court; see *Duignan* v. *United States*, 274 U.S. 195, 200, and the many cases cited therein.

Certain further matters were never presented to the Court of Appeals for review. The District Court held (R. 38) that the defense of repair was not available to Aro, insofar as Ford cars are concerned, because those cars were unlicensed. In this connection the District Court construed the settlement agreement with Ford, executed long after the infringing cars were all on the streets, as not extending to Aro (R. 33, fn. 1). None of Aro's questions on appeal below sought a different interpretation of the Ford agreement.

Aro never questioned the validity of the Mackie-Duluk patent, or the standard of invention which should be applied, or the constitutionality of the Patent Act, in the Court of Appeals. Insofar as Aro discusses such questions in its brief (pp. 69 *et seq.*) the issues are new; and appear to have been afterthoughts.

Moreover, notwithstanding the extensive discussion regarding alleged violation of the anti-trust laws in its brief, Aro never raised such questions anywhere below. Insofar as Aro seeks an award of treble damages from this Court (Aro's brief, p. 75) it would appear that Aro seeks to convert the instant suit from a patent case to an anti-trust case, with this Court to sit as a trial court on the matter without even a prior pleading directed to any alleged anti-trust violation.

B. The Proposed Rules of Law Propounded By Aro and the Government Cannot, Under the Facts of This Case, Extend to Ford Cars

Every case wherein the question of repair or reconstruction arises at all, must necessarily involve a device originally sold under license of the patentee or his licensee, for if the device involved was *not* sold under original license, then all questions of repair or reconstruction are moot. Where the issue of repair or reconstruction does arise, therefore, considerations regarding release of the original structure from the patent monopoly, by reason of an original sale, are not involved. The original license, and any license which may be implied therefrom, never extends to reconstruction.

In sharp distinction to the foregoing, if the original device is sold, not by the patentee or his licensee, but by an infringer (i.e., if the original device is an "infringing article"), one who even repairs the infringing article is by such act of repair himself an infringer; for, by so repairing the article, he perpetuates the infringement. See *Thomson-Houston Electric Co.* v. *Ohio Brass Co.*, CA-6, 80 Fed. 712, 722-3; *Remington Rand Business Service* v. *Acme Card System Co.*, CA-4, 71 F.2d 628, 630; and *Union Special Machine Co.* v. *Maimin*, 161 Fed. 748, 750.

The Trial Court correctly found that entirely different questions are here involved, insofar as Ford and General Motors cars are concerned (R. 38):

> "I pass to the question of infringement. This has two aspects. Some cars manufactured and sold with Mackie-Duluk tops [General Motors cars] were licensed. Others were not [Ford cars]. As to the former, defendants are protected if their fabrics are to be regarded as mere repair, and not reconstruction. As to the latter, defend-

ants have no protection against a claim for contributory infringement under § 271(c) if they made a material part, with knowledge that it was to be used in a patented structure, which was not a staple article of commerce suitable for substantial non-infringing use." (Matter in brackets added.)

The Trial Court thus found that the defense of "repair" could *not* be raised against Ford cars, since these cars were unlicensed. Whatever this Court's view be toward the Government's new test of reconstruction, it is submitted that Aro must nevertheless be liable for its Ford activities, for, at the very least, having "repaired" infringing devices.

The Trial Court's findings would seem to dispose of all issues here involved insofar as Ford cars are concerned. If this Court wishes to re-examine the record, however, a full discussion of the Ford agreement will now be given.

A top fabric of the Mackie-Duluk type appeared on certain Ford Motor Company automobiles, roughly during the years 1952-1954 (R. 33). Ford was charged with infringement of the patent; and the Ford agreement settled this charge. This settlement agreement was executed on July 21, 1955. Let us, therefore, examine the situation on the day before, i.e., July 20, 1955. As of this date, *Ford had already completed its manufacture of all the cars here involved;* these cars were on the streets; every such car was already an infringement of (not licensed under) the Mackie-Duluk patent; and Aro had been manufacturing and selling their Mackie-Duluk type fabrics for, and installing such tops on, these cars for more than one and a half years after notice of infringement. As of July 20, 1955, there was no agreement anywhere in existence which could have aided Aro in escaping

liability for at least one and a half years of infringement [i.e. for, at the very least, repairing an infringing article].

The situation was not changed, insofar as Aro was concerned, when the Ford agreement was signed the next day. As the Trial Court held, Aro was not protected "by virtue of certain releases or licenses given General Motors and Ford" (R. 33, fn. 1); and (R. 27):

> "On its face the agrement demonstrated an intention not to release persons like the defendants who had made replacements in the past * * *"

These findings are clearly correct. Paragraph 1 of the Ford agreement releases certain infringers but does not release Aro, or various other infringers. For example, the release extends to "Ford * * * [and] *its* * * * dealers". Independent dealers, e.g. in used cars, who are not "its dealers" of Ford, were and still are liable for infringement. Aro supplied replacement tops to such independent used car dealers (R. 94); and in such a transaction neither the seller nor purchaser was released by the Ford agreement, and both were infringers. Moreover, the limited release to certain infringers did not "erase" the infringement, i.e. the infringing cars were and *still are* infringing articles, see *Conmar Products Corp.* v. *Tibony*, 63 F. Supp. 372 (DC-NY, 1945). Nor, as held in the *Conmar* case, did the release extend by implication to contributory infringers such as Aro; and the Trial Court so found (R. 27).

Rights against persons such as Aro were not only *not* released by implication, *but were expressly reserved in paragraph 5 of the Ford agreement.* This reservation could not possibly have misled or hurt the users of the cars or independent firms like Aro. All

the Ford cars in question had already been sold and had long been infringements. No implication could have attached to the original sale as Ford had no rights then. The patentee could later release liability for certain acts of infringement, without releasing all liability. Indeed, it is clear from paragraph 1 of the Ford agreement that car owners themselves were not released when their car had a replacement top fabric thereon, such situations being expressly excepted from the release.

Ford itself acquired no rights to manufacture or sell replacement top fabrics simply by reason of the release in paragraph 1 of the Ford agreement. To the contrary, paragraph 3 comprises a license extending solely to the Ford Motor Company, *strictly limited* to replacement top fabrics (the very subject matter here in controversy), and requires that Ford pay royalties for manufacture and sale of the specially shaped Mackie-Duluk type fabrics. Aro apparently contends that, by reason of the Ford agreement, Aro (a stranger to the agreement) should have the right to do royalty-free exactly what Ford paid a royalty for doing. The Ford agreement, however, did not even give Ford the rights Aro seeks to imply in itself by reason of that agreement.

The Trial Court's finding regarding the nature of Ford cars, i.e. they were *unlicensed* structures, was not challenged by Aro on appeal below (cf. Aro's questions on appeal, R. 642). By reason of the particular facts of the instant case, therefore, the rules of law proposed by the Government and Aro have no application to Aro tops made for Ford cars. The Government would appear to concede that this is so, as evidenced by the Government's letter to Respondent, dated May 3, 1960, and reproduced facing this page.

UNITED STATES DEPARTMENT OF JUSTICE

WASHINGTON, D. C.

Address Reply to the Division Indicated and Refer to Initials and Number

May 3, 1960

RAB:CHW
60-358-0

Elliott I. Pollock, Esquire
1200 18th Street N.W.
Washington 6, D.C.

Re: Aro Manufacturing Co. v. Convertible Top Replacement Co.

Dear Mr. Pollock:

I understand from your letter to Mr. Weston of April 22, 1960, as further amplified in a conference on that date attended by you, Mr. Hollabaugh, and Messrs. Weston and Stern of the Appellate Section, that the memorandum which the Government filed in support of grant of certiorari in the above case has been given an interpretation in some quarters believed by you to be erroneous. You have therefore requested a letter clarifying the position taken by the Government in this memorandum.

The Government's position, as stated at page 4 of the memorandum, was that "the holder of a patented machine or combination exhausts his patent rights when he or his licensee sells the machine covered by his patent, and that the purchaser or the purchaser's supplier does not infringe the patent upon replacement of an unpatented element which becomes unusable in ordinary course in advance of the other components of the combination, * * *." (Underscoring supplied.) The views which we expressed had reference to replacement of the fabric portion of convertible tops which had been installed pursuant to a license from the patentee. We took no position respecting infringement if there was replacement of the fabric portion of convertible tops which had not been manufactured or installed under license from the patentee.

Sincerely yours,

ROBERT A. BICKS
Acting Assistant Attorney General
Antitrust Division

C. Aro's Contentions of Impropriety Were Not Made An Issue Below and Are Moreover Totally Unfounded

Aro has devoted substantial portions of its brief to a discussion of alleged misuse arising out of the transfer to Respondent of a territorial grant under the patent in suit. Aro's charges are wholly unfounded. The record is clearly to the contrary and, along with the statutory and case law, shows the clear propriety of everything done by Respondent and its predecessor heretofore. The Trial Court, upon consideration of the whole record on this point, only a small portion of which has been printed, found that Aro's allegations were "clearly not made out" (R. 33, fn. 1); that plaintiff was *not* guilty of "inequitable conduct" (R. 39, fn. 8); and that "there is no basis for [Aro's] claim that * * * plaintiff is attempting to harass the unwary" (R. 40).

Aro did not appeal these findings, and presented no question to the Court of Appeals even remotely touching on territorial grants or corporate relationships (R. 642). Nevertheless, apparently in an effort to obscure the merits of Respondent's case, certain of Aro's charges were repeated in its Court of Appeals brief.[21] The Court of Appeals apparently gave these charges no credence.

Although the issue is not properly before this Court (not having been appealed), and although Aro's charges were expressly rejected below, Respondent deems it advisable to clarify the record and law on the question lest there be some belief that, absent such

---

[21] In so doing, Aro seems once more to have engaged in an activity which has characterized certain aspects of its defense throughout this litigation, i.e. as noted by the Trial Judge, the inclusion of "various matters in defendants' briefs which clearly should not have been there." (R. 47)

clarification, Respondent concedes the accuracy of Aro's stated views. In so clarifying the situation, Respondent is once more put in the position commented upon by the Trial Judge (R. 47):

> "Defendants' frequently repeated argument that it is 'up to plaintiff to prove its case,' does not have a highly convincing ring coming from one who has shown that this contention adds the further qualification, '*including the proving false of irresponsible statements* made by the defendants'." (Emphasis added.)

Aro states that Respondent never received income (Aro's brief, p. 7), and is a "shell" corporation (Aro's brief, p. 65). But the record shows that "plaintiff *has* received income in the past and expects, through proper business relationships to receive income in the future." (R. 636).

Aro says that Respondent and its predecessor, Automobile Body, "conspired" (Aro's brief, pp. 66-7); but Aro does not give a single record citation to support its charges of "conspiracy." In complete rebuttal of the "conspiracy" charge, the witness Wright testified that there is no director, officer, or stockholder common to both Respondent and its predecessor; that no "person, regardless of his status as an officer or otherwise * * * can control decisions in both corporations"; and that there was no financing of or other assistance in the instant litigation by Automobile Body (R. 102).[22]

---

[22] Wright's testimony so clearly showed the absence of any "conspiracy," and of any other possible impropriety envisioned by Aro, that Aro *stipulated* the testimony of Mr. Wharton, President of Automobile Body, who was then present for examination. Aro did not designate any portion of the lengthy testimony, which it had itself taken, for printing before the Court of Appeals (the short excerpts from Wright's testimony, R. 101-3, were designated by Respondent).

Aro insinuates impropriety since the same firm of patent attorneys represents both Respondent and its predecessor. But Wright testified that Automobile Body did not even know of the instant litigation until more than two years after it had been filed, and then become aware of it by reason of a subpoena served on Automobile Body, shortly before trial, *by Aro* (R. 103).

Aro suggests (Br., pp. 65-6) that, by the transfer of patent rights to Respondent, Automobile Body secreted relevant information. But Aro itself took extensive testimony of Automobile Body constituting over 200 pages of transcript, in the course of said testimony asked for a number of documents from Automobile Body's files, and was immediately given *every such document* sought. The material quoted by Aro at pp. 65-6 of its brief (which Aro knows full well is *not of record*, cf. footnote 21, *supra*) is a fragmentary quotation from preliminary proceedings before another Court (Aro's fn. 103) dealing with a vague subpoena served by Aro; and these other proceedings were promptly settled by stipulation when Aro clarified the material sought. Aro received all the material set forth in the stipulation. Aro also departs from the record in relying on such material as the 1959 Washington Metropolitan Area Telephone Directory (Aro's Brief, pp. 7, 62).

Aro says (Br., p. 63-4) that a license granted by Automobile Body required that royalties be calculated on licensee's total sales in specified categories, including "unpatented" tops. But Aro itself *stipulated* that the royalties received by Automobile Body resulted from operations "under" (not outside of) their patents (R. 32). Moreover, the license agreement was clearly proper, *Automatic Radio* v. *Hazeltine, supra.*

Aro says (Br., pp. 56-7) that certain agreements entered into by Automobile Body were illegal as patent tie-in agreements. But Aro never challenged the validity of these agreements below, in fact urged that they were entirely valid, and relied on them as affording Aro alleged protection for their operations (R. 33, fn. 1). The agreements, on their face, show that they did *not*, as Aro alleges, "authorize sales of patented combinations by Ford and General Motors on the condition that the purchaser of the automobile not use replacement top fabrics purchased from a competitor of those replacement top manufacturers designated by the patentee * * *" (Aro's Br., pp. 56-7). Where do the agreements recite such a condition? Where is there any designation of competing replacement top manufacturers? Where indeed does the Ford agreement, for example, even "authorize sales of the patented combinations" (it was entered into long after the last car had been sold) Insofar as can be determined, Automobile Body never sold anything, and never made any designation or condition of the type alleged by Aro.

Aro says (Br., p. 68), that by transferring rights in one patent to Respondent, Automobile Body was trying to litigate individual patents in separate suits. But the Trial Court found that Automobile Body's two patents were concerned with entirely different inventions (R. 37-8); and Aro itself admitted that either of said patents "could be practiced without infringement of the other" (Aro's original Answer, filed May 23, 1956, paragraph 18). Aro *changed* their structures for the avowed purpose of avoiding infringement (R. 39); and it is not understood that Aro believes, or ever did believe, that the Ackermans patent should have or could have been litigated

against Aro. If Aro did have any substantial question regarding infringement of the entirely separate Ackermans invention, Aro could have easily filed suit for declaratory judgment.

Aro insinuates impropriety in the fact that Respondent acquired a territorial grant under the patent in suit. But such a grant is expressly authorized by statute, 35 U.S.C. § 261, which is quoted in full in an Appendix to this brief and provides:

> "Subject to the provisions of this title, patents shall have the attributes of personal property.
>
> * * * * * *
>
> "* * * The applicant, patentee, or his assigns or legal representatives may in like manner grant and convey an exclusive right under his application for patent, or patents, to the whole *or any specified part of the United States.*" (Emphasis added.)

Aro supposes some impropriety since Respondent brought suit. But, as a matter of general law, the right of a territorial assignee to bring suit cannot be doubted, see *Waterman* v. *Mackenzie*, 138 U.S. 252; *Hobbie, et al.* v. *Jennison*, 149 U.S. 355; *Keeler, et al.* v. *Standard Folding Bed Co.*, 157 U.S. 659. And Respondent could properly sue for past infringement, *Crown Die & Tool Co.* v. *Nye*, 261 U.S. 24. Indeed, 35 U.S.C. § 271(d) expressly states that Respondent shall *not* be

> "deemed guilty of misuse or illegal extension of the patent right by reason of his having * * * (3) sought to enforce his patent rights against infringement or contributory infringement."

Nor indeed was the validity or force of Respondent's title in any way modified when its assignor continued

to receive royalties (in the instant case, from operations in territories which the assignor retained unto itself), *Rude, et al.* v. *Westcott, et al.*, 130 U.S. 152. The grant to Respondent, and Respondent's subsequent bringing of suit, were thus clearly proper.

V. THERE IS NO CONSTITUTIONAL QUESTION IN THIS CASE

Congress, in enacting 35 U.S.C. § 271(c), hardly exceeded its authority. The power of Congress to legislate upon the subject of patents is plenary, *McClurg* v. *Kingsland*, 1 How. 202, 206; *United States* v. *Dubilier Condenser Corp.*, 289 U.S. 178, 189. The clear and concise definition of contributory infringement now in the statute, and every element of that definition, represents no more than a codification of what has long and consistently been recognized as contributory infringement.

Congress did not propose, by enactment of § 271(c), to protect well-known staple articles having general usage. The statute was intended to protect components which, though claimed in combination with other elements, were themselves new. Thus, the part protected was required by Congress to be "a material part of the invention", and Aro concedes and the legislative history shows (Aro's Brief, p. 40) that the term "material part" means "*part of the inventive contribution, something new that did not exist before that came from him.*" Such "new" structures most certainly are cognizable by Congress under Art. I, § 8 of the Constitution.

This, however, is the very nature of the uniquely shaped fabric tops here involved, i.e. the Court of Appeals noted that these special fabrics had "patentable novelty" (R. 651). Thus, neither the Act, or its application in the instant case, is unconstitutional.

CONCLUSION

The concurrent findings of both courts below that the patent in suit is valid and infringed are fully supported by the record, and their rulings are in accord with the decisions of this Court, which Congress reaffirmed and re-enacted in 1952. The Government's arguments here, which represent an effort to narrow the protection given a patentee against contributory infringers, were made to Congress in 1952 and rejected. Accordingly, the judgment below should be *affirmed*.

Respectfully submitted,

ELLIOTT I. POLLOCK
Counsel for Respondent
904 Ring Bldg.
Washington, D. C.

PAUL V. POWER
82 Devonshire St.
Boston, Mass.,
Of Counsel.

APPENDIX

35 U.S.C. § 261. Ownership; assignment

Subject to the provisions of this title, patents shall have the attributes of personal property.

Applications for patent, patents, or any interest therein, shall be assignable in law by an instrument in writing. The applicant, patentee, or his assigns or legal representatives may in like manner grant and convey an exclusive right under his application for patent, or patents, to the whole or any specified part of the United States.

A certificate of acknowledgment under the hand and official seal of a person authorized to administer oaths within the United States, or, in a foreign country, of a diplomatic or consular officer of the United States or an officer authorized to administer oaths whose authority is proved by a certificate of a diplomatic or consular officer of the United States, shall be prima facie evidence of the execution of an assignment, grant or conveyance of a patent or application for patent.

An assignment, grant or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the Patent Office within three months from its date or prior to the date of such subsequent purchase or mortgage. July 19, 1952, c. 950, § 1, 66 Stat. 810.

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In the

Supreme Court of the United States

OCTOBER TERM, 1960

No. 21

ARO MANUFACTURING CO., INC., ET AL.,

PETITIONERS,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC.,

RESPONDENT.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT

REPLY BRIEF FOR PETITIONERS

DAVIS WOLF,
Counsel for Petitioners
168 DEVONSHIRE ST.
BOSTON 9, MASS.

HOLCOMBE
E. GREENFIELD

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CITATIONS

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REPLY BRIEF FOR PETITIONERS

I. ALL THE QUESTIONS PRESENTED ARE PROPERLY BEFORE THIS COURT IN REVIEWING THE JUDGMENT OF THE COURT BELOW.

Respondent contends that some issues set forth in the questions presented were discussed so obscurely or not at all before the court below that these issues are not now properly before the Court (Resp. Br. 71-72, 77).[1] But this Court has "appellate Jurisdiction, both as to Law and

[1] We shall refer to the Brief for Respondent and Brief for Petitioners herein as Resp. Br. and Pet. Br., respectively.

Fact . . ." U.S. Const. art. III, § 2. That is, this Court reviews judgments, not opinions or briefs. Brown, *Process of Law*, 72 Harv. L. Rev. 77, 80 (1958). The Court unanimously rejected respondent's contention in *Muncie Gear Works, Inc.* v. *Outboard, Marine, & Mfg. Co.*, 315 U.S. 759, 765-68 where Mr. Justice Jackson said:

> We are not foreclosed from a decision under § 4886 on the point by the obscurity of its presentation in the courts below. This issue has been fully presented to this Court by the petition for a writ of certiorari, and in subsequent briefs and argument; and there is not the slightest indication that respondents have been prejudiced by such obscurity. To sustain the claims in question upon the established and admitted facts would require a plain disregard of the public interest sought to be safeguarded by the patent statutes, and so frequently present but so seldom adequately represented in patent litigation. *Id.* at 768.

II. The Top Fabric Could Have Been Claimed If It Were An Invention Which The Patentee Wished To Monopolize.

Respondent contends that it is unnecessary to separately claim the top fabric in order to obtain a limited monopoly in top fabrics used in the patented combination. Stated in a light most favorable to respondent, its reasons for asserting that the fabric need not be claimed can be summarized as follows. Although the claims in suit cover a combination, the fabric is the single component which characterized the invention (Resp. Br. 16-17). The

> . . . lower metal body structure or tonneau having a body panel, a folding bow structure supported by the

> tonneau . . . and a wiping arm provided with a punched out wiping boss attached to a part of the bow structure and guided at its other end . . . (R. 595)

are background elements (Resp. Br. 15-16). The top fabric could not have been separately claimed because of limitations in the English language and Patent Office restrictions (Resp. Br. 22).

But the patent claims use the English language to describe the top fabric as

> flexible top material . . . the top material at the rear quarter extending down . . . (R. 595).

It is true that the Patent Office would have never allowed a claim to the top fabric alone using these or any other words, but that's because the top fabric is not an invention, and Mackie and Duluk never claimed it was. Mackie and Duluk claimed as their invention a combination of old elements whose operative relationship was set forth as

> flexible top material supported by the bows and having the top material at the rear quarter extending down and secured to said panel on the inside and below the top of the metal body or tonneau, said top material spreading and adjoining the top of the side of the tonneau when the bow structure is raised, and a wiping arm . . . attached to a part of the bow structure and guided at its other end to cause it to wipe the top material in raising the top and seal the joint between the top material and the top of the tonneau (R. 595).

All the claim language quoted above is from Claim 9, the broadest claim in the Mackie-Duluk patent.

If we accept respondent's reasons for the top fabric not being separately claimed, its position as to the applicability of section 271(c) can be stated most favorably to it as follows. Since the combination is an invention and the top fabric is the most important single element of that combination, it is a material part of the invention within the meaning of section 271(c) (Resp. Br. 16-17). Although top fabrics of similar shape and almost identical dimensions fit both Ford Motor Co. cars which incorporate the patented combination as original equipment and Chrysler Corporation cars which do not have the patented combination as original equipment (R. 226-27), those fabrics intended for use in Ford Motor Co. cars are not suitable for substantial noninfringing use within the meaning of the exclusionary clause of paragraph (c) because a replacement fabric for one model car will not fit another model (Resp. Br. 27) due to differences in the size and shape of the body shells (R. 193-94).

But this construction proposed by respondent is inconsistent with the basic holding in *Mercoid* and *Carbice* that the grant of a patent on a combination does not authorize the patent owner to restrain competition in a single unpatented element of the combination sold for original use therein, even if the unpatented element has no other actual commercial use. And the holding in these cases was codified by the enactment of the contributory infringement provisions of section 271.

When the Patent Act came up for a vote in the Senate, the following colloquy between Senator Saltonstall and Senator McCarran, the Chairman of the Judiciary Committee which unanimously reported the bill favorably, shows that the Act codified existing patent laws.

> Mr. SALTONSTALL: I am not a patent lawyer, but I know patents are a very technical subject. Does the

bill change the law *in any way* or only codify the present patent laws? (Emphasis added).

Mr. McCarran: It codifies the present patent laws. 98 Cong. Rec. 9323 (1952).

Senator McCarran then obtained consent to have a prepared statement printed into the record without reading that statement to the assembled senators. The Senate then immediately passed the bill without having been able to read the statement. The statement said that some changes had been made in the law of patents without specifying the changes. *Ibid.*

But there is no question that the senators who were assembled on July 4, 1952 and voted to pass the bill understood from Senator McCarran's spoken statement that the Patent Act of 1952 was a codification of the then existing patent laws. We believe that in addition to codifying the holdings in *Mercoid* and *Carbice*, the contributory infringement provisions of section 271 codify the holding in *Amalgamated* (Pet. Br. 41-44) and *Wallace* v. *Holmes*, 29 Fed. Cas. 74 (No. 17,000) (D. Conn. 1871).

Wallace v. *Holmes* exemplifies the narrow definition of contributory infringement codified in the statute. There the claim covering the lamp read:

> I claim the improved lamp, as not only constructed with its cone or deflector, F, and its chimney rest, D, and chimney arranged with respect to each other as described, but as having the said deflector provided with peripheral springs, or the same, or the slits h, h, and the rest, D, made concavo-convex, and provided with an annular groove or lip at the bottom, for supporting the chimney, the whole being substantially as described or represented. 29 Fed. Cas. at 79.

The defendant made and sold every claimed feature of the invention except the chimney, knowing that the numerous individual purchasers would add the chimney and thereby directly infringe the patent. The court said:

> It was claimed, in behalf of complainant, that the chimney is no material part of the invention, and, therefore, that the defendants have made and sold all that is material to the patent. *Ibid.*

The court held that selling this material part of the invention[2] with the knowledge that the purchaser would add the immaterial background element, the chimney, to form the patented combination, was a virtual infringement. Since both Senate and House reports refer to contributory infringement as being a part of our laws for over 80 years, S. Rep. No. 1979 at 9, H. Rep. No. 1923 at 3, 82d Cong., 2d Sess. (1952), this 1871 case, the first case on contributory infringement, would seem to exemplify the narrow area where contributory infringement could properly be applied as understood by Congress.

Like the top fabric fragmentarily illustrated in the Mackie-Duluk patent (R. 589), the chimney was only fragmentarily illustrated in the *Wallace* v. *Holmes* patent. 29 Fed. Cas. at 75. Judge Rich recognized that using the patent on the lamp to control the sale of the unpatented chimney was misuse. *1949 Hearings* at 6. And we see no logical reason for allowing respondent and its assignor to restrain competition in the sale of the unpatented fragmentarily illustrated top fabric.

In support of its asserted right to a limited monopoly in unpatented top fabrics, respondent relies upon *Leeds &*

---

[2] The words "material part of the invention" were the very words added by Congress to restrict the scope of the original provisions on contributory infringement (Pet. Br. 38-46).

Catlin Co. v. *Victor Talking Mach. Co. (No. 2)*, 213 U.S. 325 (1909) (Resp. Br. 5, 9, 24, 31, 36, 46, 65, 66). This case held that the owner of a combination patent covering a phonograph with the record as one element of the patented combination, could prevent the sale of unpatented phonograph records to be used in the patented phonograph. But the Court expressly disapproved this holding as inconsistent with the views expressed in *Mercoid*. 320 U.S. at 668. Moreover, had *Leeds & Catlin (No. 2)* been decided after the enactment of the Clayton Act, we think the Court would have reached an opposite result because the patentee was violating section 3 by conditioning an implied license to use the patented phonograph combination on the purchase of unpatented phonograph records from a source designated by the patentee. *Motion Picture Patents Co.* v. *Universal Film Mfg. Co.*, 243 U.S. 502, 517 (1917) (by implication).[3]

Respondent argues that section 271 restored *Leeds & Catlin (No. 2)* (Resp. Br. 65). The best evidence cited in support of this proposition is testimony in the *1949 Hearings* of Mr. Stedman of the Department of Justice, pointing out the pitfalls in the original provisions on contributory infringement which went twice unreported (Pet. Br. 38-39). And the response by Congress to the criticism of Mr. Stedman and others was the enactment of a much more restricted provision on contributory infringement (Pet. Br. 38-48).

[3] We could distinguish the case at bar from *Leeds & Catlin (No. 2)* by pointing out that phonograph records were purchased in addition to the original record whereas the top fabrics sold by petitioners replace worn fabrics which are discarded. In addition, the phonograph record itself was an invention, though unpatented, whereas the top fabric is not. However, we prefer to rely on the basic unsoundness of *Leeds & Catlin (No. 2)* recognized by this Court in *Mercoid*.

III. The Scope of the Contributory Infringement Provisions is Important for Deciding Petitioners' Right To Declaratory Relief.

We counterclaimed for a declaratory judgment that petitioners did not contributorily infringe the Mackie-Dulux patent (R. 11-12). If petitioners are to receive the complete relief authorized by Fed. R. Civ. P. 54(c), there ought to be a declaration that they are free to sell unpatented top fabrics for original or replacement use without any restraints whatsoever. This holding would make it unnecessary to decide whether replacing worn fabrics was an infringement. It would also reassure the public that combination patent claims define the limits between infringing and noninfringing conduct. Moreover, combination patentees would be reminded again to separately claim novel elements of their combinations which they wished to monopolize.

On the other hand, a contrary holding would place a heavy burden on sellers of unpatented parts. For they would be bound to ascertain whether the combination in which the part is designed to fit is patented by a third party. And combination patentees would be given additional parties to sue in forums where the direct infringer might not be amenable to suit under the special patent venue provision. 28 U.S.C. § 1400(b) (1948). We believe that the contribution of a combination patentee to the progress of the useful arts is not sufficient to justify this encroachment on the rights of parts sellers and the public to a market for unpatented parts free from restraints.

Mr. Justice Hughes said, "Review by the Supreme Court is . . . in the interest of the law, its appropriate exposition and enforcement, not in the mere interest of the litigants." S. Rep. No. 711, 75th Cong., 1st Sess. 39 (1937). And the greatest interest of the law is to guide the conduct of the public in its daily life so that litigation will be avoided.

Uncertainty as to the bounds of patent claims can only lead to efforts by combination patentees to expand the scope of their monopolies, and those against whom expanded rights are asserted must accept the expansion or face an expensive uncertain law suit.

IV. The Cases On Reconstruction Relied Upon By Respondent Permit the Patentee To Restrain Competition In the Patented Entity.

The policy of the patent laws in rewarding the patentee for an inventive contribution is carried out when he receives the profit or royalty derived from the initial sale. If someone reconditions the patented article after its useful life is exhausted or increases the functional capacity of the patented article without the permission of the patentee, that someone is depriving the patentee of the reward from the initial sale of a patented article. But the patentee's right to exclude extends only to the patented entity. And the patentees in the cases holding infringement relied upon by respondent (Resp. Br. 46-61), excepting *Leeds & Catlin (No. 2)* discussed above and another case discussed below, were only restraining competition in structures covered by their patents.

For example, in *Davis Elec. Works* v. *Edison Elec. Light Co.*, 60 Fed. 276 (1st Cir. 1894) (Resp. Br. 47-49), the patent covered a light bulb comprising carbon filaments in an evacuated glass bulb with conductors passing through the glass for delivering electric current to the filaments. When a light bulb burns out, the average person throws it away and buys a new one. But the infringer collected the burned-out patented light bulbs, removed the carbon filaments and the attached conductors, put new filaments and conductors in the old glass bulb, and evacuated and resealed the bulb to make a new light bulb, reusing only

the glass envelope. Since the infringer deprived the patentee of the profit or royalty associated with the sale of a new patented light bulb, infringement was properly found.

In *Morrin* v. *Robert White Eng'ring Works*, 143 Fed. 519 (2d Cir. 1905) (Resp. Br. 49), the patent for a boiler covered a combination of a group of like patentable but unpatented steam generating tubes in a supporting cylinder which the court regarded as a background element. The defendant sold only the tubes. The court held that "furnishing practically new sets of tubes . . . was, in fact, furnishing a new boiler essentially reconstructed in all of its novel features. This was infringement." *Ibid.* But the court also held that replacing a single burned-out patentable but not separately patented tube was not an infringement. *Id.* at 520. Since the patentee in this 1905 case was trying to restrain competition in the sale of the unpatented tubes sold singly, it would seem as if the patentee could not today enforce his claim for what might now be legitimately contributory infringement against sellers of new sets of tubes until he purged himself of his misuse in restraining the sale of single tubes. *Morton Salt Co.* v. *G. S. Suppiger Co.*, 314 U.S. 488, 493 (1942).

V. Respondent and Its Assignor Misused the Patent In Violation of the Antitrust Laws.

Respondent emphatically states:

> There is no suggestion in the record that the sale of even a single top was diverted to or from Aro, or to or from anyone else, by reason of any conduct whatsoever of either respondent or anyone else. (Resp. Br. 70).

But William D. Hall admitted writing a letter to the

Howard Zink Corporation (Dep. of William D. Hall, p. 32, Tr. 880-84) and identified a photostat of that letter attached to the defendants' request for admission 58 and referred to as Defendants' Exhibit 25. The letter dated August 28, 1956 stated:

> Your replacement tops for [specified] convertible automobiles . . . Ford, Mercury and Lincoln models for 1952 through 1954 . . . infringe the said Ackermans patent.
>
> Your replacement tops for Ford and Mercury models for 1952 through 1954, and Lincoln models from 1952 to 1955 infringe the said Mackie-Duluk patent.
>
> General Motors Corp., Ford Motor Co. and Atlas International Co. have purchased licenses from our client [Automobile Body] and pay us a royalty on each replacement top that they sell for one of the above-mentioned cars.
>
> Instead of settling for past infringement and otherwise working out detailed negotiations for replacement for the aforesaid cars, some manufacturers are finding it convenient to purchase their tops, within the above categories, from Atlas International Co. We understand that Atlas is giving favorable prices in this respect and if you care to follow that policy it would of course eliminate any question of infringement.

Mr. Hall responded to a question as follows:

> Q. With respect to the letters you have sent out, how many of these companies you contacted have become licensees?
>
> A. Atlas has become a licensee and Sears Roe-

> buck and Company purchases all their materials from Atlas and, therefore, in effect they are licensed. (Dep. of William D. Hall, p. 34).

Respondent argues that the antitrust laws are not violated because respondent and its assignor do not sell top fabrics. That was fully answered in *Mercoid*. The patentee Mid-Continent Investment Co. was a patent holding company which did not sell the unpatented furnace thermostats, yet it violated the antitrust laws and was subjected to a counterclaim for treble damages.

An important purpose of the antitrust laws is to promote free competition so that the public obtains quality products at the lowest price. When respondent's assignor exacts a royalty from the sale of each unpatented replacement fabric, the cost of each fabric to the public is correspondingly increased to defeat this important purpose of the antitrust laws. The patent laws carve out an exception to the antitrust laws consistent with the constitutional purpose of promoting the progress of the useful arts by granting a patent monopoly limited to the scope of the patent claims covering the invention for the term of the patent grant. But we don't see how this constitutional purpose is advanced by allowing the Mackie-Duluk patentees to levy this toll on the public for the privilege of purchasing an unpatented part of the patented discovery.

Respondent claims that its assignor's agreement licensing unpatented top fabrics in return for specified royalties are legal under the holding in *Automatic Radio Mfg. Co. v. Hazeltine Research, Inc.*, 339 U.S. 827 (1950) (Resp. Br. 68-69, 79). But the holding in that case has no application here. Hazeltine licensed Automatic Radio under hundreds of patents and patent applications to manufacture and sell radios incorporating one or more patented electronic circuits. A particular model of radio might include one or

two patented circuits. Since each radio is sold as a complete unit for a set price, it is difficult to apportion this set price to patented and unpatented circuits. Instead of basing the royalty on the fraction of the radio selling price apportionable to patented circuits, the licensor and licensee, presumably for their mutual convenience, decided to base the royalty on the total sales of the licensee. But the licensor granted licenses to make and sell patented circuits. Respondent's assignor grants licenses to sell unpatented replacement top fabrics. And respondent asks this Court to enjoin petitioners from selling these fabrics.

In *Automatic Radio* the Court said:

> That which is condemned as against public policy by the "Tie-in" cases in the extension of the monopoly of the patent to create another monopoly or restraint of competition — a restraint not countenanced by the patent grant. See, e.g. Mercoid . . . 339 U.S. at 832.

And in his dissenting opinion Mr. Justice Douglas stated the well-established rule designed to curb the use of patents, predicting the acts of respondent and its assignor. He said:

> One who holds a patent on article A may not license the use of the patent on condition that B, an unpatented article be bought. Such a contract or agreement would be an extension of the grant of the patent contrary to a long line of decisions. . . . For it would sweep under the patent an article that is unpatented or unpatentable. Each patent owner would become his own patent office and by reason of the leverage of the patent, obtain a larger monopoly of the market than the Constitution or statutes permit. 339 U.S. at 837-38.

We ask this Court to hold that respondent and its assignor, who hold the Mackie-Duluk patent on a CONVERTIBLE FOLDING TOP WITH AUTOMATIC SEAL AT REAR QUARTER, may not license the continued use of the patented combination on condition that the replacement fabric, an unpatented article, be bought from Ford, General Motors, Atlas or some other replacement fabric seller who pays royalties to respondent's assignor.

While respondent questions the existence of express provisions in the agreements licensing replacement fabrics (Resp. Br. 80), it does not and cannot question that the effect of these agreements, especially when coupled with its suit to enjoin petitioners from selling replacement fabrics, is precisely an attempt to condition continued use of the patented combination on purchasing unpatented replacement fabrics from Ford, General Motors, Atlas or someone else who pays royalties to respondent's assignor. See *Leitch Mfg. Co.* v. *Barber Co.*, 302 U.S. 458, 463 (1938).

Respondent does not question that purchasers of convertible automobiles with the patented combination as original equipment use this combination with the authority of its assignor by virtue of the license retained by General Motors (R. 241, 509) and the release granted to Ford, so long as they use the original fabrics (R. 241, 510-11; Pet. Br. 48-49). These users are therefore not infringers under section 271(a) (Pet. Br. 76). Respondent and its assignor claim a right to revoke that authority and treat these automobile owners as infringers when the original top fabric and each replacement fabric is replaced. The authority to use is restored if the top fabric is purchased from someone who pays respondent's assignor a royalty. Respondent and its assignor certainly seem to be claiming the right to authorize continued use of the patented combination on the condition that each unpatented replacement fabric be bought from a source which it designates.

Respondent states that it and its assignor do not expect royalties from the sale of replacement fabrics which are installed with the rear quarter snap-fastened to the outside of the automobile body instead of permanently fastened to the rain trough inside the body as called for by the patent (Resp. Br. 70). But the automobile owner no longer has use of the patented combination, even though he can use the automobile without it. Thus, respondent is effectively claiming the right to force disuse of the patented combination when the worn fabric is replaced. But that right is not conferred by the patent grant. *Wilson* v. *Simpson*, 50 U.S. (9 How.) 109 (1850).

VI. Petitioners' Pleading Alleged Use of the Patent To Illegally Restrain Trade and Affirmatively Sought Relief.

Respondent states that there is no prior pleading directed to any alleged antitrust violation (Resp. Br. 72). Our answer included the following allegations:

> . . . [Respondent] was organized for the purpose of this suit and assigned the ownership of said Patent No. 2,569,724 for the Commonwealth of Massachusetts for the sole purpose of avoiding direct charges against the Automobile Body Research Corporation of misuse of said patent. Said Automobile Body Research Corporation has entered into at least one licensing agreement and/or has caused others to be sublicensed under agreements improperly extending the scope of the claimed subject matter of said patent and has thereby misused said patent and has improperly restrained commerce.
>
> . . . [By acquiring the Mackie-Duluk patent from Gen-

> eral Motors] Automobile Body Research Corporation has improperly extended its ownership of patents by this acquisition to monopolize and control the manufacture of automobile convertible tops. . . . (Defendant's Answer filed May 23, 1956, paras. 17 and 18; R. 1)

and requested the following affirmative relief:

> d. That this court find and enter a decree herein holding that said Patent No. 2,569,724 has been misused.
>
> g. That the defendants have judgment for costs and such other and further relief as equity may require or to this honorable court may seem meet and just. (Defendants' counterclaim filed May 23, 1956, para. 4; R. 1, 12).

It is true that there is no explicit request for treble damages for the violation of the antitrust laws by respondent and its assignor, but we believe that our pleading meets the requirements of FED. R. CIV. P. 8 of setting forth "a short and plain statement of the claim showing that the pleader is entitled to relief, and . . . a demand for judgment for the relief to which he deems himself entitled."

And FED. R. CIV. P. 54(c) specifically provides that

> . . . every final judgment shall grant the relief to which the party in whose favor it is rendered is entitled, even if the party has not demanded such relief in his pleadings.

Petitioners do not claim that the extent of their damages have been proved. We merely ask for the right to introduce evidence on the extent of damages and the amount of counsel fees.

VII. Respondent Doesn't Deny That It Was Formed Solely For The Purpose Of Bringing This Suit.

Respondent objects to our reference to public court records and to a telephone directory which is in every home and office in Washington. But it does not deny the truth of the statements supported by these references (Resp. Br. 79). It is true that we subpoenaed and deposed individuals connected with Automobile Body with the aid of the Baltimore and Washington federal courts. However, if Automobile Body had brought this suit directly instead of forming the respondent suing corporation, we would have been able to obtain the relevant information through interrogatories and through depositions in Boston.

We think that this Court should state that the formation of a shell corporation to bring suit ought to always bar that corporation and the parties behind it from maintaining a suit in equity. This rule is especially important in the case at bar where federally granted monopoly rights involving the public interest are asserted.

Conclusion

The judgment of the court of appeals should be reversed with instructions set forth in our main brief conclusion (Pet. Br. 75).

Respectfully submitted,

David Wolf,
Counsel for Petitioners
68 Devonshire St.
Boston 9, Mass.

Of Counsel,
Charles Hieken
George L. Greenfield

E COPY

Office-Supreme Court, U.S.
FILED
MAR 22 1961
JAMES R. BROWNING, Clerk

IN THE

Supreme Court of the United States

OCTOBER TERM, 1960

No. 24

ABO MANUFACTURING CO., INC., ET AL., *Petitioners*,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC., *Respondent*.

RESPONDENT'S PETITION FOR A LIMITED REHEARING: OR, IN THE ALTERNATIVE, MOTION FOR AMENDMENT OR CLARIFICATION OF THE COURT'S OPINION

ELLIOTT I. POLLOCK
Counsel for Respondent
904 Ring Bldg.
Washington, D. C.

PAUL V. POWER
82 Devonshire St.
Boston, Mass.,
Of Counsel.

PRESS OF BYRON S. ADAMS, WASHINGTON, D. C.

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IN THE

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OCTOBER TERM, 1960

No. 21

ARO MANUFACTURING CO., INC., ET AL., *Petitioners*,

v.

CONVERTIBLE TOP REPLACEMENT CO., INC., *Respondent*.

RESPONDENT'S PETITION FOR A LIMITED REHEARING: OR, IN THE ALTERNATIVE, MOTION FOR AMENDMENT OR CLARIFICATION OF THE COURT'S OPINION

Now comes Respondent and moves that this Court's opinion, rendered February 27, 1961, be amended or clarified to limit the scope thereof, consistent with the Government's own view of this case as *amicus*, to tops sold for use on cars which were originally licensed. Such limitation, while implicit in the Court's opinion, was expressly stated only in the concurring opinion of Mr. Justice Brennan. In the alternative a limited rehearing is prayed for.

In connection with the foregoing, it is noted that the Trial Court expressly found that the defense of repair did not extend to replacement tops made for unlicensed Ford cars; that Aro did not appeal that ruling to the Court of Appeals; and that the finding is supported by many prior decisions fully consistent with this Court's opinion in the instant case.

CERTIFICATE

The instant motion and petition, as well as the brief in support thereof, are believed to be well founded; and are presented in good faith and not for delay.

ELLIOTT I. POLLOCK
Attorney for Respondent

BRIEF FOR RESPONDENT IN SUPPORT OF PETITION FOR A LIMITED REHEARING, OR FOR AMENDMENT OR CLARIFICATION OF THE COURT'S OPINION

Brief Statement of Facts

During the years 1950-54, the General Motors Corp. manufactured convertible cars covered by, and originally licensed under, the Mackie-Duluk patent. These cars had a fabric top which was replaced after a period of years to preserve the appearance of the car. This Court has now held that replacement of such fabric tops comprises a mere repair, rather than a reconstruction of the top; and that since the sale of the original car was under license, the original licensed sale carried with it an implied license to repair wherefore there was no infringement. Respondent is not asking for a rehearing on this holding of the Court.

The Ford Motor Company also manufactured automobiles covered by the patent for the years 1952, 1953 and 1954, and Ford then ceased such manufacture. Ford had no license whatsoever throughout the entire time of this manufacture. Petitioner Aro sold replacement tops for Ford and Mercury cars, beginning in 1954 and continuing thereafter, these replacement tops being designated as Aro's part No. 134 (R 120, 30). Aro also replaced tops on Ford cars for its customers in its own shop (R 107-8). These tops could be used only on the unlicensed Ford cars and would not fit any other cars (R 120).

The Trial Court expressly distinguished between replacement tops for licensed General Motors cars and replacement tops for unlicensed Ford cars, and held that there was no implied license under the patent

to repair Ford cars wherefore the defense of "repair" did not extend to Ford cars (R. 38):

> "I pass to the question of infringement. *This has two aspects.* Some cars [General Motors] manufactured and sold with Mackie-Duluk tops *were licensed.* Others [Ford] were *not.* As to the former, defendants are protected if their fabrics are to be regarded as mere repair and not reconstruction. As to the latter, defendants have no protection against a claim for contributory infringement under Section 271(c) if they made a material part, with knowledge that it was to be used in a patented structure, which was not a staple article of commerce suitable for substantial non-infringing use." (Emphasis and matter in brackets added.)

Moreover, by this finding that certain "cars" were not licensed, the Trial Court made it clear that, even after the "Ford agreement" (R 510), the Ford cars in question were still infringements. The Ford agreement, in effect, gave a limited release to certain *persons*, for certain acts of then-existing infringement (i.e. prior acts of "making, using, or selling"). However, the cars themselves were "not licensed," nor were any persons prospectively released from later-occurring acts of infringement respecting such still infringing articles. This is, indeed, the customary effect of a patent infringement release, i.e. it is merely retrospective in operation; does not by implication, release parties or acts other than those specifically named; and the originally unlicensed and infringing articles are still unlicensed, and infringements of the patent, *Conmar Products* v. *Tibony*, 63 F. Supp. 372, 375 (DC-NY, 1945).

UNITED STATES DEPARTMENT OF JUSTICE

WASHINGTON, D. C.

Address Reply to the Division Indicated & Refer to Initials and Number

May 3, 1960

RAB:CHW
60-358-0

Elliott I. Pollock, Esquire
1200 18th Street N.W.
Washington 6, D.C.

Re: Aro Manufacturing Co. v. Convertible Top Replacement Co.

Dear Mr. Pollock:

I understand from your letter to Mr. Weston of April 22, 1960, as further amplified in a conference on that date attended by you, Mr. Hollabaugh, and Messrs. Weston and Stern of the Appellate Section, that the memorandum which the Government filed in support of grant of certiorari in the above case has been given an interpretation in some quarters believed by you to be erroneous. You have therefore requested a letter clarifying the position taken by the Government in this memorandum.

The Government's position, as stated at page 4 of the memorandum, was that "the holder of a patented machine or combination exhausts his patent rights when he or his licensee sells the machine covered by his patent, and that the purchaser or the purchaser's supplier does not infringe the patent upon replacement of an unpatented element which becomes unusable in ordinary course in advance of the other components of the combination, * * *." (Underscoring supplied.) The views which we expressed had reference to replacement of the fabric portion of convertible tops which had been installed pursuant to a license from the patentee. We took no position respecting infringement if there was replacement of the fabric portion of convertible tops which had not been manufactured or installed under license from the patentee.

Sincerely yours,

ROBERT A. BICKS
Acting Assistant Attorney General
Antitrust Division

I.

Aro did not appeal the finding that the defense of repair did not extend to Ford cars (R 642, 648); and the Department of Justice has expressly stated that its proposed rule of law, which it urged upon this Court, does not extend to the situation where the car was originally unlicensed. A reproduction of a letter from the Department of Justice to this effect faces this page.

The decision of the Trial Court as to the Ford cars should therefore be affirmed by this Court, since no appeal was taken to the Court of Appeals from the District Court holding that the defense of repair was not available as to Aro tops sold for Ford cars.[1]

II.

This Court's decision apparently concerned General Motors cars, and was based on the ground that there was no *direct* infringement, and hence there could be no contributory infringement. Thus, this Court said:

> "It is admitted that petitioners know that the purchasers intend to use the fabric for replacement purposes on automobile convertible tops which are covered by the claims of respondent's combination patent, and such manufacture and sale with that knowledge might well constitute

[1] In Footnote 10, the majority said that misuse "is not an issue in this case". The minority said that this issue "is not before this Court at this time" since (footnote 5) "Aro did not appeal that finding" to the Court of Appeals. It seems likely, by analogy, that both the majority and the minority of this Court felt that Respondent was entitled to recover for Ford cars, at least on the ground of no appeal. If so, clarification is requested so the record will be clear.

> contributory infringement under § 271(c), if, but only if, such a replacement by the purchaser himself would in itself constitute a *direct* infringement under § 271(a), for it is settled that if there is no *direct* infringement of a patent there can be no *contributory* infringement."

That there was *direct* infringement in respect to Ford cars is, however, beyond question. Title 35 USC § 271(a) provides:

> "* * * *whoever without authority* makes, uses or sells any patented invention * * * infringes the patent." (Emphasis added.)

A Ford car owner obviously "used" his unlicensed car, and such use by the owner was clearly direct infringement. Unlicensed used car dealers, to whom Aro regularly sold its tops (R 94), undoubtedly thereafter sold the unlicensed Ford cars on which they added new tops; and this again was an act of direct infringement. Therefore it is clear beyond question that Aro's Ford replacement tops, [which were especially constructed for Ford cars and could not be used on General Motors cars (R 50, 120)] were sold "for use in an infringement of such patent" as provided in 35 USC § 271(c):

> "Whoever sells a component of a patent machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use *in an infringement of such patent*, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer." (Emphasis added.)

III.

All four opinions of the members of this Court recognize, at least implicitly, that, by reason of the distinction between unlicensed Ford and licensed General Motors cars, Respondent should recover for Ford car replacements.

Thus, the majority has stated, inter alia, that *Cotton-Tie* v. *Simmons*, 106 US 89, turned in part on the fact that the ties were "Licensed to use once only" (Opinion f.n. 9); and that this Court's prior cases have held that "*a license to use a patented combination* includes the right 'to preserve its fitness for use * * *' (citing cases)."

Mr. Justice Brennan, concurring in the result, makes an express distinction between Ford and General Motors cars, thereby supporting the action sought by the instant petition.[2] Indeed, by concurring in "the result," Mr. Justice Brennan's distinction between Ford and General Motors cars would suggest that this same "result" might have been intended by the majority, although not expressly stated in the majority opinion.

Mr. Justice Black's concurring opinion (footnote 12) cites, with approval, the case of *United States* v.

---

[2] While Mr. Justice Brennan has further stated that Respondent was granted relief, below, in respect to Ford replacements made "before July 21, 1955," this date appears only in a memorandum opinion rendered by the Trial Court on December 4, 1957, *before trial* (R 28). The Trial Judge did not rule, at this early posture of the case, that this was a final cut-off date. After trial, the Trial Court found that the Ford agreement did not license *any* Ford cars (R 38). And far from limiting his ruling by any cut-off date in respect to Ford cars, the Trial Court's interlocutory judgment (R 42) entered December 15, 1958, *after* trial, included in item 3, Aro's parts No. 134 (tops for Ford cars) in their entirety.

Univis Lens Co., 316 US 241; and, in *Univis* (p. 251) this Court stated:

> "We may assume also, as appellees contend, that sale of the blanks by an *unlicensed* manufacturer to an *unlicensed* finisher for their completion would constitute contributory infringement by the seller * * * *." (Emphasis added.)

This Court, in *Univis*, then proceeded to distinguish such unlicensed sales from sales "by the patentee or his licensee".

It is explicit in Mr. Justice Harlan's dissenting opinion that Respondent should recover on replacements for Ford cars, as well as for General Motors cars.

Thus, both courts below, Mr. Justice Brennan (in the last sentence of his concurring opinion), and the three dissenting justices of this Court, all have held (and the Justice Department has not disagreed) that Aro, in selling Ford tops, sold "a component * * * of a combination * * * constituting a material part of the invention * * * for use in an infringement of such patent * * *", as required by § 271(c) supra; and that, therefore, Respondent should properly recover for Aro's replacement activities in respect to Ford cars. The other five justices of this Court have not as yet expressly ruled on Respondent's rights of recovery for tops sold for use on the unlicensed Ford cars.

IV.

It has been long settled that repair of an infringing machine is in itself an act of *direct* infringement. See 69 Corpus Juris Secundum § 287:

> "* * * a person is an infringer where he repairs an infringing article, machine, or device" (emphasis added).

In *Williams* v. *Hughes Tool Co.*, CA-10, 186 F. 2d 287, the court held that "the repair of the bit thereafter constituted an infringement", confirming the general rule that a repair of an infringing article is itself an act of infringement.

See also *Union Special Machine Co.* v. *Maimen*, 161 Fed. 748, 750 (CC-Pa. 1908, affirmed 165 Fed. 440, CA-3):

> "In other words, if one without right constructs or disposes of an *infringing* machine, it *affords no protection to another to have merely repaired it*; the repair, by supplying an essential part of the patented combination, contributing by so much to the perpetuation of the infringement. (Emphasis added.)

And see *Thomson-Houston Electric Co.* v. *Ohio Brass Co.*, CA-6, 80 Fed. 712, 722-3 (Taft, J.); and *Remington Rand B. Service* v. *Acme Card System Co.*, CA-4, 71 F. 2d 628, 630.

It would appear that the majority did not wish to disturb the foregoing established rule of direct infringement, for the majority opinion states:

> "And § 271(a) of the new Patent Code, which defines 'infringement', left intact the entire body of case law on direct infringement."

This same view has been expressed by Mr. Justice Black:

> "The language and history of that Act show plainly: (1) that * * * a person who knowingly aids, encourages or abets the direct infringement of a patent is to be held liable as a contributory infringer * * *."

V.

The so-called "Ford Agreement" (R 510), between Respondent's predecessor in title and the Ford Motor Company, was carefully considered by the Trial Court and found not to grant any license broad enough to authorize sale of tops for repair of infringing Ford cars. The agreement with Ford was no more than a limited release settling a charge of past infringement by Ford, executed long after the infringing cars were all on the streets, and long after Petitioner Aro had been selling and actually itself installing replacement tops on these infringing cars. The agreement nowhere licensed Ford cars or changed their status as "infringements"; nowhere licensed Aro or like replacement manufacturers, and nowhere licensed owners of cars to have replacement tops placed on their infringing cars.

Prior to the agreement, Ford, Aro, and Ford car owners, were all clearly liable for infringement. The agreement wrought no change in Aro's liability. As stated by the Trial Court during consideration of Petitioners' motion for summary judgment (R 27):

> "On its face the agreement demonstrated an intention not to release persons like defendants who had made replacements in the past * * *."

The agreement wrought only a limited change in the car owner's liability. For example, the "release" of paragraph 1 expressly *excluded* from its scope all claims for infringement (including claims against car owners) arising from prior replacement of tops (R 510-11). Moreover, the agreement expressly stated that it did not extend to making replacements in the future, see paragraph 5 (R 512):

"5. AB reserves the right to license under said Ackermans patent No. 2,549,153 and said Mackie-Duluk patent No. 2,569,724 the manufacture, *use* and sale of replacement top fabrics other than those supplied to, made by or sold by Ford, its associated companies, domestic and foreign, to the extent that AB is entitled to reserve such right under 35 United States Code, § 271 (1952)." (Emphasis added.)

These reservations did not mislead any car owners or deprive them of any rights which they had prior to the agreement. The car owners were all outright infringers before the agreement was signed, and hence had no right to use their infringing cars with either the original or a replacement top thereon. The Ford agreement gave them no release if they had already replaced the top, and gave them no right to replace the top in the future. All claims for direct infringement, arising from use of the car after the top was replaced, whether replacement was made before or after the agreement, were expressly *not* released and were expressly reserved by the Ford agreement. The car owner was, at best, given a highly limited release, confined to his original structure only; and he could hardly complain since, prior to the release, he had no rights under the patent whatsoever.

Moreover, at the time of the agreement, the infringing Ford cars did not use an improvement feature of the Mackie-Duluk patent, i.e. the "deformable element", included in claim 10 (R. 41, line 1; 192), but not in other of the claims. However, Aro, in making its replacement, did use the improvement, namely the "deformable element" of claim 10. The release to Ford, its dealers, etc., obviously did not grant an implied license for the dealer or car owner to "replace"

an improvement feature which was not even on the original Ford cars, *Leeds and Catlin Corp.* v. *Victor Talking Machine Co.*, 213 US 301;[3] *Priebe & Sons Co.* v. *Hunt*, CA-8, 188 F. 2d 880; *Hunt* v. *Armour & Co.*, CA-7, 185 F. 2d 722; *Smith America Corp.* v. *Bendix*, 140 F. Supp. 46.

Since Ford and all of the Ford car owners were direct infringers at the time of the agreement, the total damages to which the patentee was then entitled depended on the extent of use made of the invention by all the infringers; see 35 USC § 284:

> "Damages. Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the *use* made of the invention by the infringer, together with interest and costs as fixed by the court." (Emphasis added.)

It would, therefore, have clearly been proper for Respondent to have sued Ford, Aro, and car owners for their respective infringements. In the case of such multiple suits, the Court would have assessed damages based on the extent of "use" of the invention as provided in said statute. In order to avoid such multiple suits, it was also entirely proper for the patentee to make an agreement settling its claim against one infringer, with suitable reservations to collect the remaining damages from the other infringers. The agreement of July 21, 1955, made after all of the cars were on the streets as infringements, but before all the cars had served their full life, gives the patentee

[3] "Claims are independent inventions. One may be infringed, others not * * *."

nothing more than the above statute (relating to damages) would have given him had he waited a few years longer and then sued all parties concerned for past infringement.

VI.

Under the circumstances, Respondent submits that this Court should affirmatively award Respondent damages by reason of Aro's sale of replacement tops for Ford cars; or in the alternative, remand the case to the Court of Appeals for further consideration of this point.

ELLIOTT I. POLLOCK
Attorney for Respondent

SUPREME COURT OF THE UNITED STATES

No. 21.—October Term, 1960.

Aro Manufacturing Co., Inc., et al., Petitioners, v. Convertible Top Replacement Co., Inc.	On Writ of Certiorari to the United States Court of Appeals for the First Circuit.

[February 27, 1961.]

Mr. Justice Whittaker delivered the opinion of the Court.

On April 17, 1956, respondent, Convertible Top Replacement Co., Inc., acquired a "Territorial Grant" (coextensive with "the Commonwealth of Massachusetts") of all rights in Letters Patent No. 2,569,724, commonly known as the Mackie-Duluk patent, and 10 days later commenced this action against petitioners, Aro Manufacturing Co., Inc., and several of its officers, to enjoin the alleged infringement and contributory infringement of the patent and for an accounting of profits.

The patent—one for a "Convertible Folding Top with Automatic Seal at Rear Quarter"—covers the combination, in an automobile body, of a flexible top fabric, supporting structures, and a mechanism for sealing the fabric against the side of the automobile body in order to keep out the rain. Tops embodying the patent have been installed by several automobile manufacturers in various models of convertibles. The components of the patented combination, other than the fabric, normally are usable for the lifetime of the car, but the fabric has a much shorter life. It usually so suffers from wear and tear, or so deteriorates in appearance, as to become "spent," and normally is replaced, after about three years of use. The consequent demand for replacement fabrics has given rise to a substantial industry, in which petitioner, Aro Manu-

facturing Co., is a national leader. It manufactures and sells replacement fabrics designed to fit the models of convertibles equipped with tops embodying the combination covered by the patent in suit.

After trial without a jury, the court held that the patent was valid, infringed and contributorily infringed by petitioners. It accordingly enjoined them from further manufacture, sale or use of these replacement fabrics, and appointed a master to hear evidence concerning, and to report to the court on, the matter of damages. The Court of Appeals affirmed, 270 F. 2d 200, and we granted certiorari, 362 U. S. 902.

The Court of Appeals, after holding that the patent was valid, stated that the "basic question" presented was whether petitioners' conduct constituted "making a permissible replacement of a part [the fabric] which expectedly became worn out or defective sooner than other parts of the patented combination" or whether such replacement constituted "a forbidden reconstruction of the combination." It then held that replacement of the fabric constituted reconstruction of the combination and thus infringed or contributorily infringed the patent. It reached that conclusion principally upon the ground that "the life of the fabric is not so short, nor is the fabric so cheap, that we can safely assume that an owner would rationally believe that in replacing it he was making only a minor repair to his top structure." 270 F. 2d, at 205.

Validity of the patent is not challenged in this Court. The principal, and we think the determinative, question presented here is whether the owner of a combination patent, comprised entirely of unpatented elements, has a patent monopoly on the manufacture, sale or use of the several unpatented components of the patented combination. More specifically, and limited to the particular case here, does the car owner infringe (and the supplier contributorily infringe) the combination patent when he replaces the spent fabric without the patentee's consent?

The fabric with which we deal here is an unpatented element of respondent's combination patent,[1] which covers only the combination of certain components, one of which is "a flexible top material."[2] The patent makes no claim to invention based on the fabric or on its shape, pattern or design. Whether the fabric or its shape might have been patentable is immaterial,[3] for the fact is that neither the fabric nor its shape has been patented. No claim that the fabric or its shape, pattern or design constituted the invention was made in the application or included in the patent.

Since the patentees never claimed the fabric or its shape as their invention, and the claims made in the patent are the sole measure of the grant,[4] the fabric is no more than an unpatented element of the combination which was claimed as the invention, and the patent did not confer a monopoly over the fabric or its shape. In *Mercoid Corp. v. Mid-Continent Co.*, 320 U. S. 661, 667, this Court ruled the point as follows:

> "The patent is for a combination only. Since none of the separate elements of the combination is claimed as the invention, none of them when dealt with separately is protected by the patent monopoly."

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[1] There are 10 claims in the patent. Claims 1 through 9 of the patent each specifically begin: "In a convertible automobile body, the combination of . . . ." Claim 10 does not contain the word "combination" but nevertheless equally claims only a combination.

[2] Among other elements in the claims are the automobile body structure or tonneau, a folding bow structure, a sealing strip, and a wiping arm.

[3] *Graver Mfg. Co.* v. *Linde Co.*, 336 U. S. 271, 277; *Universal Oil Co.* v. *Globe Oil & Refining Co.*, 322 U. S. 471, 484; *Milcor Steel Co.* v. *Fuller Co.*, 316 U. S. 143, 145–146.

[4] *Mercoid Corp.* v. *Mid-Continent Co.*, 320 U. S. 661, 667; *Mercoid Corp.* v. *Minneapolis-Honeywell Co.*, 320 U. S. 680, 684; *McClain* v. *Ortmayer*, 141 U. S. 419, 423–424; *Pennock* v. *Dialogue*, 2 Pet. 1, 16.

And in *Mercoid Corp.* v. *Minneapolis-Honeywell Co.*, 320 U. S. 680, 684, the Court said:

> "The fact that an unpatented part of a combination patent may distinguish the invention does not draw to it the privileges of a patent. That may be done only in the manner provided by law. However worthy it may be, however essential to the patent, an unpatented part of a combination patent is no more entitled to monopolistic protection than any other unpatented device."

See also *McClain* v. *Ortmayer*, 141 U. S. 419, 423–424; *Pennock* v. *Dialogue*, 2 Pet. 1, 16.

It follows that petitioners' manufacture and sale of the fabric is not a *direct* infringement under 35 U. S. C. § 271 (a).[5] *Cimiotti Unhairing Co.* v. *American Fur Co.*, 198 U. S. 399, 410; *Eames* v. *Godfrey*, 1 Wall. 78, 79; *Prouty* v. *Draper*, 16 Pet. 336, 341; *U. S. Industries, Inc.*, v. *Otis Engineering Co.*, 254 F. 2d 198, 203 (C. A. 5th Cir.). But the question remains whether petitioners' manufacture and sale of the fabric constitutes a *contributory* infringement of the patent under 35 U. S. C. § 271 (c).[6] It is admitted that petitioners know that the

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[5] Section 271 (a) provides:

"Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent."

[6] Section 271 (c) is as follows:

"Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use *in an infringement of such patent*, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer." (Emphasis added.)

purchasers intend to use the fabric for replacement purposes on automobile convertible tops which are covered by the claims of respondent's combination patent, and such manufacture and sale with that knowledge might well constitute contributory infringement under § 271 (c), if, but only if, such a replacement by the purchaser himself would in itself constitute a *direct* infringement under § 271 (a), for it is settled that if there is no *direct* infringement of a patent there can be no *contributory* infringement. In *Mercoid* v. *Mid-Continent*, *supra*, it was said: "In a word, if there is no infringement of a patent there can be no contributory infringer," 320 U. S. 26, 677, and that "if the purchaser and user could not be amerced as an infringer certainly one who sold to him . . . cannot be amerced for contributing to a non-existent infringement." *Id.*, at 674.[7] It is plain that § 271 (c)—a part of the Patent Code enacted in 1952—made no change in the fundamental precept that there can be no contributory infringement in the absence of a direct infringement. That section defines contributory infringement in terms of direct infringement—namely the sale of a component of a patented combination or machine for use "in the infringement of such patent." And § 271 (a) of the new Patent Code, which defines "infringement," left intact the entire body of case law on direct infringement.[8] The determina-

[7] Although these statements were made in the dissenting opinions of Mr. Justice Frankfurter and Mr. Justice Roberts, respectively, there is nothing in the majority opinion remotely suggesting any disagreement with the fundamental conclusion that there can be no contributory infringement in the absence of direct infringement.

[8] The reviser's note on § 271 (a) specifically stated that it is "declaratory only." 35 U. S. C. A., following § 271.

"The prior statute had no section defining or dealing with what constitutes infringement of a patent," and § 271 (a) was adopted "for completeness." Federico, Commentary on the New Patent Act, 35 U. S. C. A., preceding § 1, at p. 51.

tive question, therefore, comes down to whether the car owner would infringe the combination patent by replacing the worn-out fabric element of the patented convertible top on his car, or even more specifically, whether such a replacement by the car owner is infringing "reconstruction" or permissible "repair."

This Court's decisions specifically dealing with whether the replacement of an unpatented part, in a patented combination, that has worn out, been broken or otherwise spent, is permissible "repair" or infringing "reconstruction," have steadfastly refused to extend the patent monopoly beyond the terms of the grant. *Wilson* v. *Simpson*, 9 How. 109—doubtless the leading case in this Court that deals with the distinction—concerned a patented planing machine which included, as elements, certain cutting knives which normally wore out in a few months' use. The purchaser was held to have the right to replace those knives without the patentee's consent. The Court held that, although there is no right to "rebuild" a patented combination, the entity "exists" notwithstanding the fact that destruction or impairment of one of its elements renders it inoperable; and that, accordingly, replacement of that worn-out essential part is permissible restoration of the machine to the original use for which it was bought. 9 How., at 123. The Court explained that it is "the use of the whole" of the combination which a purchaser buys, and that repair or replacement of the worn-out, damaged or destroyed part is but an exercise of the right "to give duration to that which he owns, or has a right to use as a whole." *Ibid.*[9]

[9] None of this Court's later decisions dealing with the distinctions between "repair" and "reconstruction" have added to the exposition made in *Wilson* v. *Simpson*, *supra*, and that opinion has long been recognized as the Court's authoritative expression on the subject. *Morgan Envelope Co.* v. *Albany Paper Co.*, 152 U. S. 425, and *Heyer* v. *Duplicator Mfg. Co.*, 263 U. S. 100, held that an owner or licensee

The distilled essence of the *Wilson* case was stated by Judge Learned Hand in *United States* v. *Aluminum Co. of America*, 143 F. 2d 416, 425 (C. A. 2d Cir.): "The [patent] monopolist cannot prevent those to whom he sells from . . . reconditioning articles worn by use, unless they in fact make a new article." Instead of applying this plain and practical test, the courts below focused attention on operative facts not properly determinative of the question of permissible repair *versus* forbidden reconstruction. The Court of Appeals found that the fabric "is not a minor or relatively inexpensive component" of the patented combination, or an element that would expectedly wear out after a very short period of use—although its "expectable life span" is shorter than that of the other components—and, for these reasons, concluded that "an owner would [not] rationally believe that . . . he was making only a minor repair" in replacing the worn-out fabric, but that, instead, the replacement "would be counted as a major reconstruction." We think that test was erroneous.

Respondent has strenuously urged, as an additional relevant factor, the "essentialness" of the fabric element to the combination constituting the invention. It argues

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of a patented machine or combination does not infringe the patent by replacing an unpatented element of the combination which has only a temporary period of usefulness, so that replacement is necessary for continued utilization of the machine or combination as a whole. Those cases came clearly within the *Wilson* case. *Cotton-Tie Co.* v. *Simmons*, 106 U. S. 89, the only other repair-reconstruction case decided by this Court since *Wilson*, found infringement by one who bought up, as scrap metal, patented metal straps, used in tying cotton bales, after the straps had been used and severed (in unbinding the bales), and who then welded or otherwise reconnected the straps at the severed point and resold them for further use in bailing cotton. The case is distinguishable on its facts, and the fact that the ties were marked "Licensed to use once-only," was deemed of importance by the Court. Cf. *Henry* v. *A. B. Dick Co.*, 224 U. S. 1.

that the particular shape of the fabric was the advance in the art—the very "heart" of the invention—which brought the combination up to the inventive level, and it, therefore, argues that its patent should be held to grant it a monopoly on the fabric. The rule for which respondent contends is: That when an element of a patented machine or combination is relatively durable—even though not so durable as the entire patented device which the owner purchased—relatively expensive, relatively difficult to replace, and is an "essential" or "distinguishing" part of the patented combination, any replacement of that element, when it wears out or is otherwise spent, constitutes infringing "reconstruction," and, therefore, a new license must be obtained from, and another royalty paid to, the patentee for that privilege.

We cannot agree. For if anything is settled in the patent law, it is that the combination patent covers only the totality of the elements in the claim and that no element, separately viewed, is within the grant. See the *Mercoid* cases, *supra*, 320 U. S., at 667; 320 U. S., at 684.[10] The basic fallacy in respondent's position is that it requires the ascribing to one element of the patented combination the status of patented invention in itself. Yet this Court has made it clear in the two *Mercoid* cases that there is no legally recognizable or protected "essential" element, "gist" or "heart" of the invention in a combination patent. In *Mercoid Corp.* v. *Mid-Continent Co.*, *supra*, the Court said:

> "That result may not be obviated in the present case by calling the combustion stoker switch the 'heart of the invention' or the 'advance in the art.'

[10] Although the *Mercoid* cases involve the doctrine of patent misuse, which is not an issue in this case, they also specifically delimit the character of a combination patent monopoly and it is upon that matter that they are relevant here.

> The patent is for a combination only. Since none of the separate elements of the combination is claimed as the invention, none of them when dealt with separately is protected by the patent monopoly." 320 U. S., at 667.

And in *Mercoid Corp.* v. *Minneapolis-Honeywell Co.*, *supra*, the Court said:

> "The fact that an unpatented part of a combination patent may distinguish the invention does not draw to it the privileges of a patent. That may be done only in the manner provided by law. However worthy it may be, however essential to the patent, an unpatented part of a combination patent is no more entitled to monopolistic protection than any other unpatented device." 320 U. S., at 684.

No element, not itself separately patented, that constitutes one of the elements of a combination patent is entitled to patent monopoly however essential it may be to the patented combination, and no matter how costly or difficult replacement may be. While there is language in some lower court opinions indicating that "repair" or "reconstruction" depends on a number of factors, it is significant that each of the three cases of this Court, cited for that proposition, holds that a license to use a patented combination includes the right "to preserve its fitness for use so far as it may be affected by wear or breakage." *Leeds & Catlin Co.* v. *Victor Talking Machine Co.*, 213 U. S. 325, 336; *Heyer* v. *Duplicator Mfg. Co.*, *supra*, at 103; and *Wilson* v. *Simpson*, *supra*, at 123. We hold that maintenance of the "use of the whole" of the patented combination through replacement of a spent, unpatented element does not constitute reconstruction.

The decisions of this Court require the conclusion that reconstruction of a patented entity, comprised of unpatented elements, is limited to such a true reconstruction

of the entity as to "in fact make a new article," *United States* v. *Aluminum Co. of America*, *supra*, at 425, after the entity, viewed as a whole, has become spent. In order to call the monopoly, conferred by the patent grant, into play for a second time, it must, indeed, be a second creation of the patented entity, as, for example, in *American Cotton Tie Co.* v. *Simmons*, *supra*. Mere replacement of individual unpatented parts, one at a time, whether of the same part repeatedly or different parts successively, is no more than the lawful right of the owner to repair his property. Measured by this test, the replacement of the fabric involved in this case must be characterized as permissible "repair," not "reconstruction."

Reversed.

SUPREME COURT OF THE UNITED STATES

No 21.—October Term, 1960.

Aro Manufacturing Co., Inc., et al., Petitioners, v. Convertible Top Replacement Co., Inc.	On Writ of Certiorari to the United States Court of Appeals for The First Circuit.

[February 27, 1961.]

Mr. Justice Black, concurring.

I fully concur in the judgment of reversal and with the opinion of the Court but want to express some additional views because of the concurring opinion of my Brother Brennan and the dissenting opinion of my Brother Harlan. The latter two opinions, in my judgment, attempt to introduce wholly unnecessary and undesirable confusions, intricacies and complexities into what has been essentially a very simple question under the opinions of this Court, and that is: How can a court decide whether a person who has bought and owns a patented commodity composed of a combination of unpatented elements is actually making a new one so as to infringe the patent, rather than merely replacing a worn-out part or parts necessary to continue the use of the commodity, which does not constitute patent infringement? I put the question as one of direct infringement because I agree with the other three opinions in this case that the petitioner here who cut out and sold fabrics to replace worn-out covers in patented automobile tops can be guilty of *contributory* infringement only if automobile owners who buy the fabrics and use them in their own cars are themselves guilty of *direct* infringe-

ments and liable for treble damages.[1] The crucial question here therefore is one of direct, not contributory, infringement. For this reason it seems to me that most of the talk in the case about contributory infringement and misuse of patents is confusing and beside the point. For the same reason the emphasis in this Court, the District Court and the Court of Appeals on the recodification[2] of the patent laws in 1952 seems to me to be out of place. The language and history of that Act show plainly: (1) that Congress wanted to continue in force, but not expand, the judge-made doctrine of contributory infringement under which a person who knowingly aids, encourages or abets the direct infringement of a patent is to be held liable as a contributory infringer;[3] (2) that Congress

[1] This elementary principle was brought to the attention of Congress by Mr. Giles S. Rich, the chief draftsman of the provisions on contributory infringement in the 1952 recodification:

"Mr. RICH. . . . I should state at the outset that wherever there is contributory infringement there is somewhere something called direct infringement, and to that direct infringement someone has contributed. It is a very different thing from a concept like contributory negligence." Hearings before Subcommittee of House Judiciary Committee on H. R. 3760, 82d Cong., 1st Sess. 151 (1951).

[2] If anyone is inclined despite other evidence to the contrary to attribute to Congress a purpose to accomplish any far-reaching changes in the substantive law by this enactment, he should take note that just before the bill was passed in the Senate, Senator Saltonstall asked on the floor, "Does the bill change the law in any way or only codify the present laws." Senator McCarran, Chairman of the Judiciary Committee which had been in charge of the bill for the Senate, replied; "It codifies the present patent laws." 98 Cong. Rec. 9323 (July 4, 1952).

[3] To this end, the 1952 Act provides (35 U. S. C. § 271):

"(b) Whoever actively induces infringement of a patent shall be liable as an infringer.

"(c) Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the

did not want patentees to be barred from prosecuting their claims for direct infringement merely because they exercised their right to assert a claim in or out of court for con-

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vention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use, shall be liable as a contributory infringer."

The hearings and committee reports show that the only purpose of these provisions was to prevent this Court's decision in *Mercoid Corp.* v. *Mid-Continent Inv. Co.*, 320 U. S. 661, from being treated as having obliterated the law of contributory infringement:

"Mr. ROGERS. Then I take it from your statements, that there is some difference of opinion among those engaged in the practice of patent law as to whether or not the Supreme Court in its decisions has done away with contributory infringement.

. . . . . .

"Mr. RICH. There is a great difference of opinion on the part of the bar and also apparently on the part of the judiciary . . . .

"Mr. ROGERS. Then in effect this recodification, particularly as to section 231 [from which came the present § 271], would point out to the court, at least that it was the sense of Congress that we remove this question of confusion as to whether contributory infringement existed at all, and state in positive law that there is such a thing as contributory infringement, or at least it be the sense of Congress by the enactment of this law that if you have in the Mercoid case done away with contributory infringement, then we reinstate it as a matter of substantive law of the United States and that you shall hereafter in a proper case recognize or hold liable one who has contributed to the infringement of a patent.

"That is the substantive law that we would write if we adopted this section 231 as it now exists. Is that not about right?

"Mr. RICH. That is a very excellent statement. . . ." Hearings, *supra*, note 1, at 159.

"Considerable doubt and confusion as to the scope of contributory infringement has resulted from a number of decisions of the courts in recent years. The purpose of this section is to codify in statutory form principles of contributory infringement and at the same time eliminate this doubt and confusion." House Judiciary Committee Report No. 1923 on H. R. 7794, 82d Cong., 2d Sess. 9.

tributory infringement;[4] (3) that the long-existing scope of a patentee's monopoly rights was not to be expanded beyond what it had always been, that is, the exclusive right to make, use or sell a patented invention during the life of the patent.[5] The present case, therefore, narrows

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[4] To protect a patentee's right to sue for contributory infringement, the 1952 Act provides:

"(d) No patent owner otherwise entitled to relief for infringement or contributory infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having done one or more of the following: (1) derived revenue from acts which if performed by another without his consent would constitute contributory infringement of the patent; (2) licensed or authorized another to perform acts which if performed without his consent would constitute contributory infringement of the patent; (3) sought to enforce his patent rights against infringement or contributory infringement." 35 U. S. C. § 271 (d).

This provision was designed specifically to prevent the *Mercoid* case from being interpreted to mean that any effort to enforce a patent against a contributory infringer in itself constitutes a forfeiture of patent rights:

"Mr. RICH. . . .

"Other decisions following Mercoid have made it quite clear that at least some courts are going to say that any effort whatever to enforce a patent against a contributory infringer is in itself misuse. The cases are cited in the old hearings. Therefore, we have always felt—we who study this subject particularly—that to put any measure of contributory infringement into law you must, to that extent and to that extent only, specifically make exceptions to the misuse doctrine, and that is the purpose of paragraph (d)." Hearings, *supra*, note 1, at 161–162.

"The last paragraph of this section provides that one who merely does what he is authorized to do by statute is not guilty of misuse of the patent." House Judiciary Committee Report, *supra*, note 3, at 9.

[5] The 1952 Act carried out this purpose by providing:

"(a) Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent." 35 U. S. C. § 271 (a).

Although there was no statutory provision defining infringement prior to 1952, the definition adopted is consonant with the long-

down to this and no more: Is the making or the use of a new piece of fabric to replace the worn-out fabric cover of an automobile top attached to an automobile that the owner has bought and paid for as his own an infringement of a patent on that top? Note immediately that if it is an infringement it must be because the owner of the top, in doing nothing but replacing the worn-out fabric, "makes" the patented invention which is the top with all its parts. Common sense and prior decisions of this Court require us to hold that an automobile owner does not "make" a whole top when he merely replaces its worn-out fabric cover.

Let us first take a quick look at the top described in the patent. It is composed first and foremost of a metal frame, no part of which is, or could have been, patented. It also includes several other pieces of metal, one of them called a "wiper," which is simply a plain piece of metal that is not and could not have been patented. Again, there is a piece of fabric cut in a certain shape to fit and cover the unpatented frame. Of course this fabric could not be patented unless it had some peculiar novel quality of its own, but no such characteristic is or could have been claimed. The District Court held that this aggregation of nonpatentable parts was patentable as achieving a new result. The Court of Appeals, without passing on this question at all, merely took it for granted that a patentable "discovery" had been made. I shall also act

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standing statutory prescription of the terms of the patent grant, which was contained in § 4884 of the Revised Statutes as follows:

"Every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee . . . of *the exclusive right to make, use, and vend the invention or discovery* throughout the United States . . ." (Emphasis supplied.)

This provision is now contained without substantial change in 35 U. S. C. § 154.

on that assumption although I am not sure in just what respect the aggregation of these common components could possibly have served a new purpose or have been the result of anything more than the simplest childlike mechanical skill. In fact, the patentee must have known all about the old-fashioned surrey with the fringe on top and with isinglass curtains you could roll right down in case of a change in the weather. The top is also reminiscent of the tops of Model T Fords which began to scare horses on country roads nearly half a century ago. A reading of the record indicates that the new discovery might be thought to inhere in the fact that (a) this top protects from rain better than any that had previously been manufactured, (b) it could be made rainproof from the inside rather than requiring some one to get outside and manipulate snaps, or (c) the folding material is fastened "below the top of the tonneau" and "a wiping arm automatically operated by the bow structure [is used] for wiping the inside of the folding material as the top is raised and pressing it against the top of the tonneau." None of these alleged additions to the present stock of surrey and Tin Lizzie knowledge, however, gives us much aid in determining the real issue being decided here, which is whether replacing the fabric amounts to the "making" of a new top and thus a direct infringement of the patent. It is of importance in considering this question that the District Court found, and the Court of Appeals agreed, that the only thing the defendant made was "the fabric portions of convertible tops." Certainly I suppose it would not be claimed that the sale of unshaped woolen fabric—a staple article of commerce—would make a tailor or merchant guilty of contributory infringement if he sold it to the owner of a pair of patented trousers for patching purposes. But evidently the contention is that when petitioner here put his scissors or whatever cutting instrument he used on the

fabric and shaped it so that it would fit the top, he was thereby aiding the top's owner to "make" a new top, or at least to "reconstruct" one from the ground up. Nothing in any of the prior cases of this Court indicates that such a contention should be sustained.

The case that may well be classified as the leading one on the subject of "making" or "reconstruction" as distinguished from "repair" is *Wilson* v. *Simpson*, 9 How. 109, decided in 1850. That case involved a patent on a planing machine composed of unpatented parts described as the frame, the cogwheels, the shaft, and other elementary parts, which, when put together, constituted what was known as the "Woodworth planing-machine." Able counsel argued for the patentee that the cutting knives, which had to be replaced from time to time, could not be replaced without thereby infringing the patent. The contention was that the machine ceased to exist or have any "material existence" the moment its knives wore out, and that for this reason replacement of the knives amounted to a "making" of the whole patented invention which infringed the patentee's exclusive right to "make, use and vend." The Court refused to accept this conceptualistic and misleading argument as to when a tangible machine ceases to have a "material existence." It did agree that "when the material of the combination ceases to exist, in whatever way that may occur, the right to renew it depends upon the right to make the invention. If the right to make does not exist, there is no right to rebuild the combination." *Id.*, at 123. But the Court then went on to enunciate what has been the accepted rule in this Court ever since with respect to component parts of the combination: "When the wearing or injury is partial, then repair is restoration and not reconstruction. . . . And it is no more than that, though it shall be a replacement of an essential part of a combination." *Ibid.*

In further explanation the Court pointed out that "[f]orm may be given to a piece of any material,—wood, metal, or glass,—so as to produce an original result, or to aid the efficiency of one already known, and that would be the subject for a patent." It went on to say that if that patented article should happen to be broken so that its parts could not be readjusted or so worn out and beyond repair as to be wholly useless, then a purchaser could not make another to replace it without infringing, but would have to buy a new one. This because the Court said that would amount to an "entire reconstruction" of the patented article. "If, however," and this is of crucial importance with reference to the combination patent in the present case, "this same thing is a part of an original combination, essential to its use, then the right to repair and replace recurs." *Id.*, at 124.

The common-sense rule of *Wilson* v. *Simpson* was followed in *Heyer* v. *Duplicator Mfg. Co.*, 263 U. S. 100. Involved there was a combination patent, a multiple copying machine, "one element of which," the Court said, "is a band of gelatine to which is transferred the print to be multiplied and which yields copies up to about a hundred. This band is attached to a spool or spindle which fits into the machine. Anyone may make and sell the gelatine composition, but the ground of recovery was that the defendant made and sold bands of sizes fitted for use in the plaintiff's machine and attached them to spindles, with intent that they should be so used. The main question is whether purchasers of these machines have a right to replace the gelatine bands from any source they choose. If they have that right the defendant in selling to them does no wrong." *Id.*, at 101. A unanimous Court, speaking through Mr. Justice Holmes, recognized that the rule of *Wilson* v. *Simpson* disposed of this question, saying that "[s]ince *Wilson* v. *Simpson*, 9 How. 109, 123, it has been the established law that a patentee has not 'a more

equitable right to force the disuse of the machine entirely, on account of the inoperativeness of a part of it, than the purchaser has to repair, who has, in the whole of it, a right of use.'" 263 U. S., at 101. Like the bands of gelatine in *Heyer*, the fabric in the present case is a common article of commerce, and also like the gelatine it has to have a special form to fit into the combination.

None of this Court's cases relied upon by my Brothers HARLAN and BRENNAN justifies adoption of the supposed guides and standards referred to in their opinions. Deciding whether a patented article is "made" does not depend on whether an unpatented element of it is perishable, or how long some of the elements last, or what the patentee's or a purchaser's intentions were about them, regardless of whether the application of such standards is considered a question of law, as it is by MR. JUSTICE BRENNAN, or a question of fact, as it is by MR. JUSTICE HARLAN. The holdings of prior cases in this Court have not actually rested on such minor and insignificant factors in determining when an article has been "made" and when it has not. A case in which only a minimal component has been omitted from a "making" of the combination, such as the extreme example of omission of a single bolt from a patented machine or a button from a patented garment, might call upon this Court to articulate some rather obvious refinements to this simple test of "making."[6] But

[6] This point was made by Mr. Rich in the course of the hearings as follows: "If the part he is supplying is *in substance the very thing which was invented*, it seems to me personally, that he is an infringer, and he should not be let off on some little technicality that there is *something minor in the whole apparatus that he is not supplying*." Hearings, *supra*, note 1, at 153. (Emphasis supplied.) Of course, as Mr. Rich well knew, "the very thing" which is invented in any combination patent is the combination itself and not any unpatented component part of it—in this case, the whole convertible top, not the fabric used in it.

this is by no means such a case and it is dangerously misleading to suggest that so clear a case as this one requires the application of a Pandora's flock of insignificant standards, especially when it is recognized, as it must be upon analysis, that consistent application of the standards suggested would actually change the basic test from "making" to something not satisfactorily defined but indisputably different. And surely the scope of a patent should never depend upon a psychoanalysis of the patentee's or purchaser's intentions, a test which can only confound confusion.[7] The common sense of the whole matter is as recognized in the *Wilson* case and again in the opinion of the Court today, that in none but the most extraordinary case—difficult even to imagine—will a court ever have to invoke specially contrived evidentiary standards to determine whether there has actually been a new "making" of the patented article.

Neither *Leeds & Catlin Co.* v. *Victor Talking Machine Co.*, 213 U. S. 325, nor *Cotton-Tie Co.* v. *Simmons*, 106 U. S. 89, nor any other cases of this Court that have treated this subject, depart from this common-sense rule of *Wilson* v. *Simpson*. In fact, as Mr. Justice Holmes pointed out in *Heyer* v. *Duplicator Mfg. Co.*, *supra*, the question in *Leeds & Catlin* did not concern "a right to substitute worn out parts" and "[t]he authority of *Wilson* v. *Simpson* and the cases that have followed it was fully recognized [in *Leeds & Catlin*] and must be recognized here." 263 U. S., at 102. The *Cotton-Tie* case likewise contains no support for holding that replacing the fabric in this top amounts to a "making" or even a "remaking" of the whole convertible top. The patent involved there was a cotton bale tie. Marked on each, for whatever it was worth, was "Licensed to use once only." After these ties

[7] Cf. *Mercoid Corp.* v. *Mid-Continent Inv. Co.*, 320 U. S. 661, 679-680 (Jackson, J. dissenting on other grounds).

had been used once and broken off the cotton bales, the old tie material, along with the buckles, was sold as scrap, then re-rolled, straightened, riveted together, and cut into proper lengths and attached to an old buckle. It was this making of completely new ties out of the discarded scrap material that was held to amount to a making of the patented device and therefore an infringement.[8] Cf. *Morgan Envelope Co.* v. *Albany Paper Co.*, 152 U. S. 425, 433–434. *Morgan Envelope*, in addition to its distinction of the *Cotton-Tie* case, is notable for its explicit reaffirmance of *Wilson* v. *Simpson* and for its statement by a unanimous Court that "[t]he true distinction" is whether the component part of the combination is "the subject of a separate patent." 152 U. S., at 435. I agree with my Brother WHITTAKER that this remains the true distinction today.[9]

In my judgment it would create mischievous results for a majority of this Court to create or approve ambiguous evidentiary standards which could only obfuscate the simple fact of whether a person is "making" a patented article composed of old unpatentable elements. For example, there should be no attempt to decide whether there is a making by comparing the time that the different elements of such a patent normally will exist if let alone. The owner is under no obligation to let them alone. Every

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[8] See Transcript of Record, pp. 29–33, *Cotton-Tie Co.* v. *Simmons*, 106 U. S. 89.

[9] I am perfectly content with the dissenting opinion's denomination of our interpretation as a "reconstruction" of the cases in the sense in which I understand that term to be applied in these cases. I regret to say, however, that we cannot claim this interpretation to be a "discovery" in the patent sense. It was anticipated by Judge Learned Hand's citation of *Wilson* v. *Simpson* for the proposition that "[t]he [patent] monopolist cannot prevent those to whom he sells from . . . reconditioning articles worn by use, unless they in fact make a new article." *United States* v. *Aluminum Co. of America*, 148 F. 2d 416, 425.

owner has the right to repair and patch each part of the property he bought and paid for in order to make it last as long as he can. Everyone knows that this patented top is likely to last as long as the car itself if it is repaired from time to time. An accident might wholly destroy the entire top and then it might have to be replaced by a new one, which if done without the patentee's consent would of course be an infringement. I cannot suppose, however, that if the bows upon which the fabric rests at the top, or the metal frames upon which it stands, or the metal wiper which helps to level off the curtain folds, or the snaps that may have to be used, should happen to become worn out or destroyed, that anyone could reasonably come to the conclusion that a replacement of one of these worn-out parts would be a complete rebuilding of the old top or the "making" of a new one and therefore an infringement of the patent. Such a contention would seem little short of fantastic to me, and the same is true as to replacement of the fabric.

This case is of great importance in our competitive economy. The record shows that petitioner is but one of many small business enterprises filling a useful place in manufacturing the comparatively smaller parts of larger products like automobiles. It is quite right and in keeping with our patent system that small business enterprises should no more than large enterprises be allowed to infringe the patents of others. But businessmen are certainly entitled to know when they are committing an infringement. It is for that reason that the patent statutes require applicants to define with particularity and claim without ambiguity the subject matter which is regarded to be an invention. 35 U. S. C. §§ 112, 154. In the absence of suits like this how could a businessman even suspect that he might be infringing a patent by marketing an unpatented and unpatentable part of a combination like this fabric top? It has long been

settled with respect to combination patents that the monopoly rights extend only to the patented combination as a whole, and that the public is free to appropriate any unpatented part of it, "however important." *Special Equipment Co.* v. *Coe*, 324 U. S. 370, 376, and cases cited. And in the 1952 recodification Congress was very careful, in what is now 35 U. S. C. § 271 (c), to specify that a vendor is liable as a contributory infringer only if he has sold the component part "knowing" that it is to be used in an infringement.[10] But to what avail these congressional precautions if this Court, by its opinions, would subject small businessmen to the devastating uncertainties of nebulous and permissive standards of infringement under which courts could impose treble damages upon them for making parts, distinct, separable, minor parts, or even major parts of a combination patent, upon which parts no patent has been or legally could have been issued. The fact that subjection of a small business enterprise to treble damages for such activities can have disastrous or even lethal consequences is suggested by the observation of the District Court in this very case that petitioner had not made a supersedeas bond, whether because unable or unwilling to do so the court said it was not informed. The efforts of Congress to help small business enterprises keep their heads above water in the Small Business Act of 1953,[11] which was enacted almost contemporaneously with the recodification of the patent laws, could be frustrated at least in large part by subjecting those engaged in industrial activities to the constantly overhanging threat of suits for patent infringements for the sale of unpatented

[10] If the wording of the statutory provision be thought to leave any doubt on this point, the intent of Congress is made manifest by the fact that the position of the word "knowing" (originally "knowingly") in subsection (c) was changed after the hearings for this very purpose. See Hearings, *supra*, note 1, at 13, 142, 164, 176.

[11] 67 Stat. 232, as amended, 15 U. S. C. §§ 631–651.

articles. And I think it is indisputable that the unpredictability in any given case of the resolution of the intricate standards suggested by my Brothers HARLAN and BRENNAN would deter small businessmen from engaging even in activities that all members of this Court would ultimately agree do not constitute contributory infringement. In our own case these standards led to opposite conclusions when applied by three distinguished judges of the Court of Appeals and when applied by MR. JUSTICE BRENNAN.

The established policy in this Nation for more than a century has been that when an article described in a patent is sold and "passes to the hands of the purchaser, it is no longer within the limits of the monopoly. It passes outside of it, and is no longer under the protection of the act of Congress. . . . Contracts in relation to it are regulated by the laws of the State, and are subject to State jurisdiction." [12] In this day of advanced technology and mechanical appliances upon which so many people depend, this wise policy against permitting patentees to expand their control of commodities after they reach the hands of bona fide purchasers is all the more important. Congress surely did not intend for it to be left within the sole discretion of the patent monopolist whether an unpatented component part will be separately available to the purchaser for replacement in the combination or whether, when that part wears out, the purchaser will be forced to replace a larger subcombination of the patented product or perhaps even the entire aggregation. I have an idea it would greatly surprise and shock the owners of convertible auto-

[12] *Bloomer* v. *McQuewan*, 14 How. 539, 549–550; see *United States* v. *Univis Lens Co.*, 316 U. S. 241, 251, and cases collected in *General Talking Pictures Corp.* v. *Western Electric Co.*, 305 U. S. 124, 128, note 1 (dissenting opinion): This century-long mandate cannot be set aside because of what my Brother HARLAN now conceives to be a more enlightened policy in this field of law.

mobiles throughout this country to learn that there is a serious contention made that if they buy a new fabric to replace the worn-out fabric on their convertible top, loose legal formulas like those suggested by my Brothers HARLAN and BRENNAN can be applied to make them liable for treble damages, attorneys' fees and heavy costs. No such doctrine should be allowed to gain a foothold through judicial decisions. If bona fide purchasers of goods throughout the Nation are to be subjected to any such phenomenal expansion of the right of patentees, Congress, not this Court, should do it. One royalty to one patentee for one sale is enough under our patent law as written. And this proposition can be stated with knowledge that there is not a single sentence, clause, phrase or word in the entire legislative history of the 1952 recodification which could have led Congress to believe that it was being asked by means of the provisions enacted to enlarge the scope of a patentee's exclusive right to "make, use and vend" the thing patented.

A fundamental error underlying the misleading standards suggested by my Brothers HARLAN and BRENNAN is the notion that in a case of this kind a court is obliged to search for the alleged "heart" or "core" of the combination patent. This misconception, which has unequivocally been rejected in our prior decisions,[13] is nothing but an unwarranted transformation and expansion of a combination patent, which was correctly described by Mr. Justice Jackson as conferring only a ". . . right in an abstruse relationship between things in which individually there is no right." [14] A patented combination is no more than that, a novel relationship brought to bear on what presumably are familiar elements already in the public

[13] See *Mercoid Corp. v. Mid-Continent Inv. Co.*, 320 U. S. 661, 667–668, and cases cited.

[14] *Id.*, at 679 (dissenting opinion).

domain. Such familiar elements are not removed from the public domain merely because of their use, however crucial, in the novel combination. Of course, if novelty should inhere in one of the parts as well as in the whole, then that novel "heart" or "core" can be separately patented and separately protected. But in the absence of such a separate patent, which in this case would presumably be some sort of patent on the utility of the shape of the fabric, the public has the right to make, use, and vend each part subject only to the established limitation of contributory infringement: that a part may not be knowingly supplied for use by an unauthorized person in a new making of what is in effect the whole combination.

Finally, petitioner points out that there is a serious constitutional question involved in the claim that automobile owners can be mulcted for damages for replacing the worn-out fabric in their convertible tops. Article I, § 8 of the Constitution provides:

> "The Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

I have no doubt of the wide powers of the States to govern the sale of fabrics, clipped or unclipped, cut or uncut, cloth, oilcloth, isinglass or plastic. But it is difficult for me to think that shaping up a common piece of fabric with a common pair of scissors or other cutter can be exalted to that important category of "Discoveries" that the Constitution authorizes Congress to promote by special federal legislation. Nor do I believe that a purpose should be attributed to Congress to allow the courts, by means of an incalculable weighing of a complex of nebulous standards, to divine whether persons should be given monopoly rights

on account of the way they trim ordinary fabrics. If there is anything sure about the 1952 recodification it is that the purpose was to clarify not to confuse the law. The test applied in the opinion of the Court today will not confuse, is in accord with our prior decisions endorsed by Congress and, most important, is in keeping with the general purposes of this Nation to retain an economy in which competition is a general law of trade except where actual "Discoveries" have been made.

SUPREME COURT OF THE UNITED STATES

No. 21.—October Term, 1960.

Aro Manufacturing Co., Inc., et al., Petitioners, v. Convertible Top Replacement Co., Inc.	On Writ of Certiorari to the United States Court of Appeals for the First Circuit.

[February 27, 1961.]

Mr. Justice Brennan, concurring in the result.

I agree that the replacement of the top was "repair" and not "reconstruction," but I cannot agree that the test suggested by my Brother Whittaker for determination of that question is the correct one. My Brother Harlan's dissent cogently states the reasons why I also think that is too narrow a standard of what constitutes impermissible "reconstruction." For there are circumstances in which the replacement of a single unpatented component of a patented combination short of a second creation of the patented entity may constitute "reconstruction." *Leeds & Catlin Co.* v. *Victor Talking Machine Co.*, 213 U. S. 325; *Davis Electrical Works* v. *Edison Electric Light Co.*, 60 F. 276; cf. *Williams* v. *Hughes Tool Co.*, 186 F. 2d 278. These holdings applied the long established standard for determination of "repair" or "reconstruction." Under that standard there is no single test to which all must yield; rather the determination is to be based upon the consideration of a number of factors. *Wilson* v. *Simpson*, 9 How. 109; *Heyer* v. *Duplicator Mfg. Co.*, 263 U. S. 100.[1] Appropriately to be considered are the life of the

[1] The standard has been variously expressed. See, *e. g.*, "Whether the bounds of legitimate repair have been exceeded must be determined upon the facts of each case as it is presented." *Morrin* v. *Robert White Engineering Works*, 143 F. 519, 520. "In the absence of

part replaced in relation to the useful life of the whole combination,[2] the importance of the replaced element to the inventive concept,[3] the cost of the component relative

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a crucial test to which all must yield, the only aid comes from various minor or incidental considerations, and their combined effect." *Davis Electrical Works* v. *Edison Electric Light Co.*, 60 F. 276, 280. "The right, in our view, must depend in every case upon the special facts of the case as they show the relation of the two classes of parts—those supplied and those remaining in the original construction—to the patented unit. . . . there might be a structure where the putting in of a certain number of new parts would be 'reconstruction,' whereas the putting in of a smaller number would be 'repair,' or even where the putting in of one new part would be reconstruction but the putting in of two or three would not be, depending in each case upon whether, after the replacement, the structure as a whole could reasonably be said to be a new structure or the old one." *Automotive Parts Co.* v. *Wisconsin Axle Co.*, 81 F. 2d 125, 127. "Each case, as it arises, must be decided in the light of all the facts and circumstances presented, and with an intelligent comprehension of the scope, nature, and purpose of the patented invention, and the fair and reasonable intention of the parties." *Goodyear Shoe Machinery Co.* v. *Jackson*, 112 F. 146, 150. "The dividing line between repairs and a making over cannot be verbally located. What has been done can with more or less confidence be pronounced to be one or the other, but neither the one nor the other can be defined." *Hess-Bright Mfg. Co.* v. *Bearings Co.*, 271 F. 350, 352.

[2] *Wilson* v. *Simpson*, *supra*; *Heyer* v. *Duplicator Manufacturing Co.*, *supra*; *Williams* v. *Barnes*, 234 F. 339; *Micromatic Hone Corp.* v. *Mid-West Abrasive Co.*, 177 F. 2d 934; *Payne* v. *Dickinson*, 109 F. 2d 52; *El Dorado Foundry, Machine & Supply Co.* v. *Fluid Packed Pump Co.*, 81 F. 2d 782; *Slocomb & Co., Inc.*, v. *Layman Machine Co.*, 227 F. 94, affirmed, 230 F. 1021. In the *Slocomb* case the Court said, 227 F., at p. 98: "If . . . patented mechanism be composed of various parts and elements the most expensive of which have an average life of twenty years, and other parts or features of comparatively trifling cost are subjected in the operation of the mechanism to such wear as to require renewal or replacement within a period of a few months, or of a year or two, it would seem reasonable and sensible to treat such renewal or replacement as involving repairs in contradistinction to reconstruction."

[3] *Leeds & Catlin Co.* v. *Victor Talking Machine Co.*, *supra*; *Davis Electrical Works* v. *Edison Electric Light Co.*, *supra*. "In certain stages

to the cost of the combination,[4] the common sense understanding and intention of the patent owner and the buyer of the combination as to its perishable components,[5] whether the purchased component replaces a worn-out part or is bought for some other purpose,[6] and other pertinent factors.[7]

It is true that some decisions of this Court in patent misuse cases[8] raised doubt as to the continuing vitality

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of use the essence of a device, though in appearance only a small portion of it, may be lost, and its renewal amount to recon-truction." Pp. 279–280. *Morrin* v. *Robert White Engineering Works*, *supra*, p. 519.

[4] *Heyer* v. *Duplicator Mfg. Co.*, *supra*; *American Safety Razor Co.* v. *Prings Bros. Co.*, 62 F. 2d 416; *El Dorado Foundry, Machine & Supply Co.* v. *Fluid Packed Pump Co.*, *supra*; *Slocomb & Co., Inc.*, v. *Layman Machine Co.*, *supra*.

[5] *Westinghouse Elec. & Mfg. Co.* v. *Hesser*, 131 F. 2d 406, 410: "Where the perishable nature of the parts are recognized by the patentee, and where the parts are adapted to be removed from the patented combination and, from time to time, replaced, replacement of such parts is repair and not reconstruction."

And as regards indicia of an understanding see *El Dorado Foundry, Machine & Supply Co.* v. *Fluid Packed Pump Co.*, *supra*; *Slocomb & Co., Inc.*, v. *Layman Machine Co.*, *supra*.

[6] See *Leeds & Catlin Co.* v. *Victor Talking Machine Co.*, *supra*; *Connecticut Telephone & Elec. Co.* v. *Automotive Equipment Co.*, 14 F. 2d 957, affirmed, 19 F. 2d 999.

[7] Is the replaced part the dominant structural element of the combination? *Southwestern Tool Co.* v. *Hughes Tool Co.*, 98 F. 2d 42; *Automotive Parts Co.* v. *Wisconsin Axle Co.*, *supra*, p. 127: "if the new parts so dominate the structural substance of the whole as to justify the conclusion that it has been made anew, there is a rebuilding or reconstruction; and conversely, where the original parts, after replacement, are so large a part of the whole structural substance as to preponderate over the new, there has not been a reconstruction but only repair."

Has there been physical destruction of the combination from use of the component? *Cotton-Tie Co.* v. *Simmons*, 106 U. S. 89.

[8] See, *e. g.*, *Mercoid Corp.* v. *Mid-Continent Investment Co.*, 320 U. S. 661, 669: "The result of this decision, together with those which

of this standard in actions such as this one for relief from contributory infringement. But the Congress swept away that doubt when it gave the standard statutory sanction in 1952.[9] My Brother WHITTAKER's test that "[m]ere replacement of individual unpatented parts, one at a time, whether of the same part repeatedly or different parts successively, is no more than the lawful right of the owner to repair his property" plainly would not heed the congressional mandate. Instead Congress meant, as I read the legislative history of the 1952 Act, that the courts should recognize, in actions for contributory

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have preceded it, is to limit substantially the doctrine of contributory infringement. What residuum may be left we need not stop to consider."

[9] 35 U. S. C. § 271. The purpose of (c) of this section appears in the House Judiciary Committee Report, H. R. Rep. No. 1923 on H. R. 7794, 82d Cong., 2d Sess., p. 9. "The doctrine of contributory infringement has been part of our law for about 80 years. It has been applied to enjoin those who sought to cause infringement by supplying someone else with the means and directions for infringing a patent. One who makes a special device constituting the heart of a patented machine and supplies it to others with directions (specific or implied) to complete the machine is obviously appropriating the benefit of the patented invention. It is for this reason that the doctrine of contributory infringement, which prevents appropriating another man's patented invention, has been characterized as 'an expression both of law and morals.' Considerable doubt and confusion as to the scope of contributory infringement has resulted from a number of decisions of the courts in recent years. The purpose of this section is to codify in statutory form principles of contributory infringement and at the same time eliminate this doubt and confusion." The legislative history makes it clear that paragraph (d) complements (c) with the view to avoid the application of the patent misuse doctrine to conduct such as that of the patent owner in the present case. See Hearings, H. R. 3760, 82d Cong., 1st Sess., Subcommittee of the House Judiciary Committee, 1951, pp. 161–162, 169–175.

infringement, the distinction between components stated in *Wilson* v. *Simpson*, *supra*, the leading case in this field:

> "The other constituent parts of this invention, though liable to be worn out, are not made with reference to any use of them which will require them to be replaced. These, without having a definite duration, are contemplated by the inventor to last so long as the materials of which they are formed can hold together in use in such a combination. No replacement of them at intermediate intervals is meant or is necessary. They may be repaired as the use may require. With such intentions, they are put into the structure. So it is understood by a purchaser, and beyond the duration of them a purchaser has not a longer use." 9 How. 125–126.

Giles S. Rich, the chief draftsman of § 271 (c), when told that manufacturers of replacement parts for automobiles, tractors, and other machines had protested against the section in fear of being held contributory infringers under it, replied: "Whether or not they would be liable would depend on the facts in each particular case. And I think that the best way to clear that up is to take up section (c) and deal with the matter specifically and point out to you the limitations that are there, which have to be met before anybody is held liable, and then leave it to you to decide whether a parts supplier should be held liable or not, *depending on the kind of a part he may be supplying*. If *the part* he is supplying is *in substance the very thing which was invented*, it seems to me personally, that he is an infringer, and he should not be let off on some little technicality that there is something minor in the whole apparatus that he is not supplying." Hearings, H. R. 3760, 82d Cong., 1st Sess., *supra*, p. 153. He added: "in each case you

would have to look at the details and see what was invented, and in effect whether the alleged infringer is appropriating somebody else's invention, or whether he is not." Hearings, *supra*, p. 157.

However, I disagree with my Brother HARLAN that we should refrain from making an independent application of the proper standard in this case because of the conclusion of both lower courts that the replacement of the top constituted "reconstruction." I would suppose that "repair" or "reconstruction" is so far a question of law as to relieve appellate review from the restraints of Federal Rule of Civil Procedure 52 (a). See *United States* v. *E. I. du Pont de Nemours & Co.*, 353 U. S. 586, 598. In no previous case presenting the question of "repair" or "reconstruction" has this Court believed itself restrained from making an independent determination. *Wilson* v. *Simpson, supra; American Cotton-Tie Co.* v. *Simmons, supra; Morgan Envelope Co.* v. *Albany Perforated Wrapping Paper Co.*, 152 U. S. 425; *Leeds & Catlin Co.* v. *Victor Talking Machine Co., supra; Heyer* v. *Duplicator Mfg. Co., supra.* And here the error of the two courts below is manifest. The life of the top was approximately three years in contrast to the several times longer life of the other components of the combination. The top was replaceable at a cost of from $30 to $70 depending on the fabric; in contrast the cost of other elements of the combination was approximately $400. These considerations of themselves suggest that the replacement was mere "repair" of the worn component and not "reconstruction" of the patented combination. Surely they support the inference that all concerned knew that the fabric of the top would become weather-beaten or unable to perform its protective function long before those components, not so exposed and more durable as well, wore out. Its perishable nature coupled with its fractional cost as compared to the whole combination and its ready replaceability all

point to the conclusion reached here. And particularly persuasive, I think, that this replacement was mere "repair," is the role of the top relative to other components in the inventive concept. Patentable novelty inhered not merely in the shape of the fabric; the record shows that a wiping arm which pressed the material in such way as to create a seal at the belt line of the vehicle played a significantly important role in the inventive concept. The claim for the combination is that it made possible an automatic top, made the top weather-tight and prevented unauthorized access to the vehicle. The wiper arm, rather than the shape of the material alone, accomplished the inventive purposes of providing a top which was weathertight and prevented unauthorized access.[10] The shape of the fabric was thus not the essence of the device and in all the circumstances it seems reasonable and sensible to treat the replacement of the top as "repair."

I, therefore, think that the judgment of the Court of Appeals must be reversed, except, however, as to the relief granted respondent in respect of the replacements made on Ford cars before July 21, 1955.

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[10] This appears from the patent claims and from the testimony of respondent's patent and engineering experts. The following representation was made in connection with amended claims: "The real invention is fastening the folding material considerably below the top of the tonneau and then using a wiper arm automatically operated by the bow structure for wiping the inside of the folding material as the top is raised and pressing it against the top of the tonneau."

SUPREME COURT OF THE UNITED STATES

No. 21.—October Term, 1960.

Aro Manufacturing Co., Inc., et al., Petitioners, v. Convertible Top Replacement Co., Inc.	On Writ of Certiorari to the United States Court of Appeals for the First Circuit.

[February 27, 1961.]

Mr. Justice Harlan, whom Mr. Justice Frankfurter and Mr. Justice Stewart join, dissenting.

For more than a hundred years it has been the law that the owner of a device covered by a combination patent can, without infringing, keep the device in good working order by replacing, either himself or through any source he wishes, unpatented parts, but that he may not, without rendering himself liable for infringement, reconstruct the device itself, whether because of its deterioration or for any other reason, and even though all of the component parts of the device are themselves unpatented. *Wilson* v. *Simpson*, 9 How. 109; *American Cotton Tie Co.* v. *Simmons*, 106 U. S. 89; *Morgan Envelope Co.* v. *Albany Perforated Wrapping Paper Co.*, 152 U. S. 425; *Leeds & Catlin Co.* v. *Victor Talking Machine Co.*, 213 U. S. 325; *Heyer* v. *Duplicator Mfg. Co.*, 263 U. S. 99. The underlying rationale of the rule is of course that the owner's license to use the device carries with it an implied license to keep it fit for the use for which it was intended, but not to duplicate the invention itself. Correlatively, one who knowingly participates in an impermissible recon-

struction of a patented combination is guilty of contributory infringement. "Direct" and "contributory" infringements are now codified in § 271 of the Patent Act of 1952. 35 U. S. C. § 271.[1]

In this case the District Court and the Court of Appeals upon full consideration have concurred in finding that Aro's replacement-supplying of the fabric portion of respondent's convertible automobile tops contributorily infringed the latter's territorial rights under the valid Mackie-Duluk combination patent, in that such activity constituted a deliberate participation on Aro's part in a forbidden reconstruction of the patented combination. In reversing, the Court holds that there can be no direct infringement (and hence, of course, no contributory infringement) of a combination patent by replacement of any of the components of the patented entity unless (1) such component is itself separately patented or (2) the *entire* entity is rebuilt at one time. Since the fabric cover component of the Mackie-Duluk top was not itself separately patented, and since it constituted but one part of the patented combination, the Court concludes that Aro's supplying of such covers for replacement on

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[1] "(a) Except as otherwise provided in this title, whoever without authority makes, uses or sells, any patented invention, within the United States during the term of the patent therefor, infringes the patent.

"(b) Whoever actively induces infringement of a patent shall be liable as an infringer.

"(c) Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer."

cars equipped with respondent's tops did not as a matter of law constitute contributory infringement.[2]

My Brother BRENNAN's opinion, while disagreeing with that conclusion would reverse because on its view of the record, untrammeled by the contrary findings and conclusions of the two lower courts, it is concluded that what

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[2] The Mackie-Duluk invention was described by the Court of Appeals as follows:

"Folding tops for vehicles consisting of bows of wood or metal covered with a flexible waterproof fabric . . . are, of course, as old as the automobile art which in the beginning only adopted with necessary modifications the much older art of collapsible tops for chaises, buggies and some other horse drawn vehicles. The rear panels of the folding tops of earlier days were fastened permanently at the bottom to the outside of the top of the rear portion of the body of the vehicle, and the quarters, the rear portions of the sides of the vehicle, if protected at all, were protected with flaps or curtains, sometimes integral with the top and sometimes not, fastened at the bottom to the outside of the top of the body with buttons, snaps or some equivalent means of fastening. Naturally, to prevent tearing, these quarter flaps had to be unfastened by hand when the top was lowered and when the top was put up fastened again by hand for neat appearance and also to prevent the entrance of rain. This manual fastening and unfastening of the bottoms of the quarter flaps presented no great problem until the advent of the so-called convertible automobile with a folding top operated mechanically rather than manually. The problem presented by the quarter flaps of tops of this kind was first partially solved by fastening the bottom of the flap to the outside of the top of the body of the vehicle with 'releasable fastening means,' that is to say, with some sort of slide fastening device which would detach automatically when the top was lowered. The major part of the problem remained, however, for when the top was put up the flaps had to be fastened manually, which meant that the operator was required to get out of the car altogether, or at least to reach out, often, of course, in the rain. The object of the Mackie-Duluk patent was 'to provide an automatic fastening and sealing means at the top and sides of the tonneau of the convertible' which 'never has to be operated or touched by the driver of the car.' And, as we have already indicated, the District Court

here took place constituted "repair" and not "reconstruction" of the Mackie-Duluk tops.

I am unable to subscribe to either of these views.

I.

I believe that the narrow concept of what constitutes impermissible reconstruction, reflected in the opinion of the Court, departs from established principles—principles which, it will be shown, were approved by Congress when it enacted § 271 of the new Patent Act, over objections of the Department of Justice altogether comparable to the position which it now advances as *amicus* in the present case.

The all-important thing is to determine from the past decisions of this Court what the proper test of "reconstruction" is, for I agree that 35 U. S. C. § 271 (c) limits

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found that the patentees succeeded in attaining their object by devising a patentable combination of elements.

"The Mackie-Duluk device consisted of providing an elongated flap integral with the quarter sections of the fabric top adapted to be permanently fastened at the bottom deep within the body of the car, at or perhaps below, but certainly not in front, of the axis of rotation of the bows, to a trough welded to the body of the car and provided with a drain to carry off water entering between the flap and the car body. In addition, to minimize the entrance of water between the body and the flap, they provided a 'wiper arm', so-called, which in effect acted as an additional, low, rearward bow pressing the downwardly extending flap outwardly against the top of the body of the vehicle as the top is raised from its folded position to close, or substantially to close, any gap there might be between the inside of the top of the body of the car and the flap extending downward into the interior of the automobile body." 270 F. 2d, at 202–203.

The District Court said:

"Mackie-Duluk was a substantial and enlightened step, filling a long-felt want, in a field in which defendants have produced, with one exception, only paper patents, the most emphasized being foreign, which did not even purport to do what Mackie-Duluk accomplished." *Id.*, at 201.

contributory infringement, to that which would be direct infringement, and that § 271 (a), dealing with direct infringement, leaves intact the pre-existing case law. The cases cited above amply demonstrate that there is no single yardstick for determining whether particular substitutions of new for original unpatented parts of a patented combination amount to permissible repair, or forbidden reconstruction. The matter is to be resolved "on principles of common sense applied to the specific facts" of a given case. *Heyer*, *supra*, at 102. The single simple rule of "reconstruction" which the Court finds in those cases can, in my view, only be divined at the expense of reconstructing the decisions themselves.

The leading case is *Wilson* v. *Simpson*, *supra*. There, in holding that the owner of a planing machine covered by a combination patent could replace from any source he desired the unpatented cutting knives thereof, the Court said, p. 125:

> "The right of the assignee [the owner of the machine] to replace the cutter-knives is not because they are of perishable materials, but because the inventor of the machine has so arranged them as a part of its combination, that the machine could not be continued in use without a succession of knives at short intervals. Unless they were replaced, the inventions would have been but of little use to the inventor or to others. The other constituent parts of this invention, though liable to be worn out, are not made with reference to any use of them which will require them to be replaced. These, without having a definite duration, are contemplated by the inventor to last so long as the materials of which they are formed can hold together in use in such a combination. No replacement of them at intermediate intervals is meant or is necessary. They may be repaired as the use may require. With such

> intentions, they are put into the structure. So it is understood by a purchaser, and beyond the duration of them a purchaser of the machine has not a longer use. But if another constituent part of the combination is meant to be only temporary in the use of the whole, and to be frequently replaced, because it will not last as long as the other parts of the combination, its inventor cannot complain, if he sells the use of his machine, that the purchaser uses it in the way the inventor meant it to be used, and in the only way in which the machine can be used."

In the *Cotton Tie* case, *supra*, the question was whether combination patents for the making of ties for cotton bales, consisting of a metal buckle and band, were infringed by one who bought as scrap metal such ties and bands after severance from cotton bales, and resold them for further use as bailing ties after piecing together several segments of the old bands and reconnecting the resulting single band with the original buckle. In holding that this was in impermissible reconstruction of the patented combination,[3] the Court said:

> "Whatever right the defendants could acquire to the use of the old buckle, they acquired no right to combine it with a substantially new band, to make a cotton-bale tie. They so combined it when they combined it with a band made of the pieces of the old band in the way described. What the defendants did in piecing together the pieces of the old band was not a repair of the band or the tie, in any proper sense. The band was voluntarily severed by the con-

[3] While, as the Court remarks (*ante*, pp. —, —), the Court there did refer to the fact that the original ties were stamped "Licensed to use once only," it is manifest that nothing really turned on that point.

> sumer at the cotton-mill because the tie had performed its function of confining the bale of cotton in its transit from the plantation or the press to the mill. Its capacity for use as a tie was voluntarily destroyed. As it left the bale it could not be used again as a tie. As a tie the defendants reconstructed it, although they used the old buckle without repairing that. The case is not like putting new cutters into a planing-machine in place of those worn out by use, as in *Wilson* v. *Simpson*, 9 How. 109. The principle of that case was, that temporary parts wearing out in a machine might be replaced to preserve the machine, in accordance with the intention of the vendor, without amounting to a reconstruction of the machine."

In *Morgan Envelope, supra*, the Court found no contributory infringement on the part of one supplying toilet paper rolls specially designed for use in a patented combination, comprising a dispenser and the paper rolls themselves. Remarking (p. 433) that there "are doubtless many cases to the effect that the manufacture and sale of a single element of a combination, with intent that it shall be united to the other elements, and so complete the combination, is an infringement," the Court found the situation before it distinguishable in that "the element [paper roll] made by the alleged infringer is an article of manufacture perishable in its nature, which it is the object of the mechanism [the dispenser] to deliver, and which must be renewed periodically, whenever the device is put to use." *Ibid.* On similar grounds the Court in *Heyer, supra*, found no contributory infringement in the intentional supplying of unpatented gelatine bands for use in a duplicating machine covered by a combination patent, of which one element was the gelatine band.

On the other hand, in *Leeds & Catlin*, *supra*, the intentional supplying of phonograph records for use on respondent's talking machines, which were protected by a combination patent covering both machine and records, was held to be contributory infringement, it being found that records were the "operative ultimate tool of the invention," that respondent's records were not inherently "perishable" in nature, and that the supplying of the competitor's records was not to replace records "deteriorated by use" or which had suffered "breakage." (P. 336.)

These cases destroy the significance of two factors on which the Court heavily relies for its conclusion in the present case: first, that the fabric top was an unpatented element of the Mackie-Duluk invention, and, second, that Aro's tops constituted a replacement of but one part of the patented combination. For as was said in *Leeds & Catlin* (p. 333), "[i]t can make no difference as to the infringement or non-infringement of a combination that one of its elements or all of its elements are unpatented"; and in all of these cases the claimed infringing replacement involved only *one* of the elements of the patented combination. Further, the different results reached in the cases, two finding "reconstruction" and three only "repair," also vitiates the reasoning of the Court, in that they show that the issue of reconstruction *vel non* turns not upon any single factor, but depends instead upon a variety of circumstances, differing from case to case. The true rule was well put by this same Court of Appeals in its earlier decision in *Goodyear Shoe Machinery Co.* v. *Jackson*, 112 F. 146, 150:

> "It is impracticable, as well as unwise, to attempt to lay down any rule on this subject, owing to the number and infinite variety of patented inventions. Each case, as it arises, must be decided in the light of all the facts and circumstances presented, and with an intelligent comprehension of the scope, na-

ture, and purpose of the patented invention, and the fair and reasonable intention of the parties. Having clearly in mind the specification and claims of the patent, together with the condition of decay or destruction of the patented device or machine, the question whether its restoration to a sound state was legitimate repair, or a substantial reconstruction or reproduction of the patented invention, should be determined less by definitions or technical rules than by the exercise of sound common sense and an intelligent judgment."

More particularly, none of the past cases in this Court or in the lower federal courts remotely suggests that "reconstruction" can be found only in a situation where the patented combination has been rebuilt *de novo* from the ground up.[4]

The reference which the Court makes to the *Mercoid* cases, 320 U. S. 661, 320 U. S. 680, is, in my opinion, entirely inapposite, since those cases, as the Court recognizes, p. ——, n. 10, *supra*, dealt with the issue of patent misuse, an issue which specifically is not before the Court at this time.[5] I realize that some of the language in the first *Mercoid* case (320 U. S., at 667–669), and more particularly its disapproving remarks about *Leeds & Catlin* (*id.*, 668), may be said to cast doubt on what it appears to me the contributory infringement cases plainly establish. Yet I cannot believe that *Mercoid* is properly to be read as throwing into discard all the teaching of the repair-reconstruction cases. What was said in *Mercoid* about contributory infringement must be read in the context of Mercoid's claim, found to have been estab-

[4] Compare note 7, *infra*.

[5] The District Court found against Aro's claim of patent misuse based on respondent's acquisition of territorial rights in the Mackie-Duluk patent. Aro did not appeal that finding.

lished, that Mid-Continent had misused its combination patent by attempting in effect to wield it as a weapon to *monopolize* the sale of an unpatented element, a claim which is not here made.

I think it significant that in stating (p. 688) that the doctrine of the *Leeds & Catlin* case "must no longer prevail against the defense that a combination patent is being used to protect an unpatented part from competition," the Court went on to say, at 668–669:

> "That result obtains here though we assume for the purposes of this case that Mercoid was a contributory infringer and that respondents could have enjoined the infringement *had they not misused the patent for the purpose of monopolizing unpatented material.* Inasmuch as their misuse of the patent would have precluded them from enjoining a direct infringement [citing the *Morton Salt* case] they cannot stand in any better position with respect to a contributory infringer. Where there is a collision between the principle of the *Carbice* case and the conventional rules governing either direct or contributory infringement, the former prevails." (Italics supplied.)

Thus *Mercoid*, far from modifying the doctrine of the *Wilson* line of cases as to what constitutes contributory infringement, assumed that doctrine and defined the special circumstances when the court would refuse to give a patentee the benefit of that doctrine.[6] Those circumstances are not present in this case.

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[6] It seems clear from the legislative history of the 1952 Act that Congress intended (1) to reaffirm the doctrine of contributory infringement as laid down in *Wilson* v. *Simpson* and reasserted in cases like *Leeds & Catlin*, (2) give that doctrine precedence against a claim of patent misuse as conceived in the *Mercoid* cases, at least

As for my Brother BLACK's opinion, the congressional action of 1952, reaffirming what I consider must be taken as the doctrine of the *Wilson* line of cases, also requires rejection of what he now conceives to be a more enlightened policy in this field of law.[7]

II.

My Brother BRENNAN's opinion for reversal rests, as I understand it, not upon the view that the two court's below applied wrong legal standards in reaching their conclusion, but that "'repair' or 'reconstruction' is so far a question of law as to relieve appellate review from the restraints of Federal Rule of Civil Procedure 52 A" and to

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where the misuse is said to inhere simply in assertion of patent rights. Both the proponents of the statute and the Department of Justice which opposed it assumed that contributory infringement, as defined in the *Wilson* line of cases was one thing, and misuse, as then most recently defined in *Mercoid*, another. See H. R. 3866, 81st Cong., 1st Sess. 53–59 (1949); H. R. 3760, 82d Cong., 1st Sess. 168–175 (1951). The opinion of the Court seems to reconfirm *Mercoid* to fuller effectiveness than it had even before the 1952 Act by treating it as if the test of whether there was contributory infringement at all was to be found in its language.

[7] This policy was before the Committee in the form of an objection to the proposed codification of the *Wilson* line of cases and its doctrine in the 1952 Act. Despite the objection Congress passed § 271 without amendment.

"Mr. CRUMPACKER: We have received protests from manufacturers of replacement parts for such things as automobiles, farm tractors and the like, who evidently fear that the language used in this H. R. 3760 would make them contributory infringers of patents on the original article, the tractor or something of that sort.

"Mr. RICH [who was the principal spokesman for the group which drafted the present statute]: Those were the most vociferous objectors to the old bills on the subject. Whether or not they would be liable would depend on the facts in each particular case. . . ." H. R. 3760, 82d Cong., 1st Sess., at p. 153 (1951).

allow the "making [of] an independent *application* of the proper standards" to the facts in this case. (Italics supplied.) For reasons larger than this particular litigation I cannot agree that it is either necessary or appropriate for us to substitute our particular judgment on this particular application of correct standards to the facts.

We do not sit in judgment on the decisions of the lower federal courts because we are endowed with some special measure of discernment, but because it is imperative that on matters of general concern, that is on matters of principle, there should be one authoritative and unifying expositor of federal law. I need not join issue on whether Rule 52 (a) serves to constrict appellate review in cases like this, cf. *Graver Tank & Mfg. Co., Inc.*, v. *Linde Air Products Co.*, 336 U. S. 271, 275, 279, for the rule which I believe should limit us is based on the purposes which this Court can and should fulfill.

In this case there is no question but that the two courts below adverted to all the relevant standards but, having done so, they concluded that on the facts before them there was contributory infringement. I cannot see what else my Brother BRENNAN is doing but reaching a different conclusion of his own. I cannot understand how such a conclusion, even were it accepted by a majority of the Court, could provide greater guidance to either courts or litigants than would a mere statement of approbation for the standards espoused by the courts below.

Because the question of "repair" or "reconstruction" must be a mixed question of law and fact, it does not follow that we should review other than gross misapplications (certainly not present here), when the legal ingredient of this mixture is concededly correct. In the analogous area of determining the issue of patentable novelty, Courts of Appeal have consistently deferred to the judgment of the District Court (see the excellent statement of Judge Fahy in *Standard Oil Development Co.* v. *Marzall*, 181 F. 2d

280, 283–284), and where they have departed from this judgment the reason has generally been because the District Court had failed to reach its conclusions by reference to correct standards. See *Kwikset Locks, Inc.*, v. *Hillgren*, 210 F. 2d 483; cf. *Great Atlantic and Pacific Tea Co.* v. *Supermarket Equipment Corp.*, 340 U. S. 147, 153, 154. Whether this practice be considered as compelled by the dictates of good sense or by Rule 52 (a), surely particular judgments fairly and reasonably reached in two lower courts in light of correct legal standards deserve at least that same deference from us.

I would affirm.